Suncrest 230 Kilovolt Loop-In Project

Administrative Draft Environmental Impact Report
Volume 1

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EXECUTIVE SUMMARY

INTRODUCTION

This Administrative Draft Environmental Impact Report (EIR) has been prepared by the San Diego Gas & Electric Company (SDG&E) for the Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) under the direction of the California Public Utilities Commission (CPUC) in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), the Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-Filing and Proponent's Environmental Assessments, the CEQA Guidelines (Title 14 California Code of Regulations Section 15000, et seq.), and CPUC General Order (GO) 131-E. Consultation and permitting in accordance with federal regulations will be conducted by SDG&E for the Proposed Project through a separate process.

Prior to the adoption of GO 131-E, GO 131-D provided guidelines for the planning and construction of transmission lines and substations in California. Under GO 131-D, proposed project proponents (e.g., SDG&E) would prepare a Proponent's Environmental Assessment (PEA) to analyze the environmental impact of a proposed project, which would be submitted to the CPUC as part of a Permit to Construct or Certificate of Public Convenience and Necessity application. However, with the adoption of GO 131-E, which superseded GO 131-D, proposed project proponents that require a Permit to Construct from the CPUC may now elect to prepare a draft version of a negative declaration, mitigated negative declaration, EIR, addendum or analysis on the applicability of an exemption from CEQA in lieu of a PEA. Therefore, in accordance with GO 131-E, SDG&E has prepared this Administrative Draft EIR for the Proposed Project.

CEQA requires the preparation of an EIR when there is substantial evidence that a proposed project may result in a significant environmental impact. An EIR is prepared to inform both the general public and public agency decision makers of the potential significant environmental impacts of a proposed project, identify measures to minimize the significant impacts, and evaluate a reasonable range of alternatives to the proposed project that could still meet the basic objectives of the proposed project while substantially lessening or avoiding the significant impacts.

As required by Section 15123 of the CEQA Guidelines, this Executive Summary identifies each significant effect with proposed measures and alternatives that would reduce or avoid that effect, areas of controversy, and issues to be resolved.

PROJECT OVERVIEW

Project Location

The Proposed Project would cross unincorporated communities within San Diego County, California, including private parcels and open space easements. In addition, the Proposed Project would traverse land managed and/or owned by the County of San Diego (County), United States (U.S.) Forest Service (USFS) (i.e., Cleveland National Forest [CNF]), Sweetwater Authority, Endangered Habitats Conservancy, and California Department of Fish and Wildlife (CDFW). One proposed staging yard would be located in the City of El Cajon. The current County land

uses around the Proposed Project include electrical transmission line corridors, road rights-of-way (ROWs), open space/undeveloped areas, and rural residential.

Background and Need for the Project

The California Independent System Operator (CAISO) 2022-2023 Transmission Plan identified the need for the Proposed Project to upgrade the California electric grid to accommodate load growth. The Proposed Project would address CAISO-identified reliability constraints (i.e., operational challenges and thermal overloads) on SDG&E's existing Transmission Line (TL) 23054 and TL23055 from SDG&E's existing Suncrest Substation to the existing Sycamore Canyon Substation, as well as the existing transformers at the existing Suncrest Substation. In addition, the Proposed Project would help supply the increase in forecasted load related to regional electrification. Based on the long-term planning assessments, higher continuous ratings are required for the 230 kV transmission lines out of the existing Suncrest Substation to handle the existing and future load conditions.

Characteristics of the Project

The Proposed Project would involve the installation of an approximately 14.5-mile-long, double-circuit 230 kV transmission line (proposed 230 kV transmission line) consisting of overhead and underground segments, as well as modifications to SDG&E's existing Suncrest Substation.

The approximately 11-mile-long overhead portion of the transmission line would first require permanent access roads, permanent walking paths, or permanent helicopter takeoff and landing zones to be established at each structure location where current access does not exist. In addition, each structure location would require a temporary work area to facilitate construction, as well as a permanent work area to accommodate the permanent footprint of the structure. The establishment of these work areas would involve vegetation clearing and blading as required to create a flat area to facilitate construction. For the overhead structures, one or more foundations for each structure would be constructed prior to the erection of tower structures or monopoles. Lastly, the conductors and optical ground wires would be strung on the transmission line structures. Following construction, a portion of land surrounding the proposed structures and some access roads would remain clear of vegetation to facilitate future inspection and operation and maintenance (O&M).

The approximately 3.6-mile-long underground portions of the transmission line, consisting of the proposed 230 kV western underground (UG) segment and the proposed 230 kV eastern UG segment, would include the installation of duct banks and utility vaults using open-cut trenching techniques, unless alternate methods (e.g., horizontal directional drilling) are required to cross existing facilities or sensitive resources. After installation of the duct banks, cable segments would be pulled into the duct banks, spliced at each of the vaults along the route as required, and terminated at the transition where the cables convert to overhead. At each end of the proposed 230 kV underground segment, the cables would rise out of the ground and terminate at cable poles to connect to the overhead portions of the transmission line. Following the completion of construction activities, open trenches would subsequently be backfilled, paved, or returned to pre-existing grade and contours, as practicable. Restoration activities would be conducted in accordance with negotiated agreements with landowners and in compliance with applicable permits.

Modifications to the existing Suncrest Substation would be conducted within the existing substation property and would not require expansion of the facility. Following the completion of the modifications at the substation, testing and commissioning would be conducted before energization.

The Proposed Project would also require the establishment of temporary staging/fly yards, temporary stringing sites, temporary guard structures, and temporary construction work areas for use during construction. Temporarily impacted areas would be restored to near-pre-construction grade and contours as practicable after work is complete. Restoration activities would be conducted in accordance with negotiated agreements with landowners and in compliance with applicable permits.

Project Objectives and Purpose

The primary objective or purpose of the Proposed Project is to address operational challenges and thermal overloads on SDG&E's existing transmission lines from the Suncrest Substation to the Sycamore Canyon Substation, as well as the existing transformers at the Suncrest Substation, as identified by CAISO in its 2022-2023 Transmission Plan. More specifically, the Proposed Project includes the following objectives:

- meet SDG&E's obligation to implement the CAISO-approved project;
- improve system reliability for SDG&E's approximately 3.7 million energy customers as well as the electrical grid as a whole;
- increase capacity to meet the forecasted load demands related to electrification;
- address operational challenges and thermal overloads on SDG&E's existing transmission lines (i.e., TL23054 and TL23055);
- address operational challenges and thermal overloads on existing transformers at SDG&E's existing Suncrest Substation;
- achieve commercial operation by 2032 to timely address critical reliability issues within the transmission system;
- locate the Proposed Project on land adjacent to SDG&E's existing ROWs or existing utility uses, or otherwise avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning to the extent practicable;
- construct, operate, and maintain the facility with safety as a top priority;
- maintain compliance with North American Electric Reliability Corporation standards; and
- avoid or mitigate significant adverse impacts to both the environment and community to achieve a project that is designed for the greatest public good and least private injury.

SUMMARY OF PUBLIC INVOLVEMENT

Pre-Filing Consultation and Public Outreach

Pre-filing consultation with the CPUC and SDG&E began in January 2025. Coordination with regulatory agencies with jurisdiction over the Proposed Project, including the USFS, Sweetwater Authority, County, CDFW, and U.S. Fish and Wildlife Service (USFWS), began in March 2025. Coordination with the Native American Heritage Commission (NAHC) began in August 2024. Public outreach to residents and property owners regarding environmental surveys associated with the Proposed Project was conducted through mailers, phone calls, and door hangers in March 2025. Pre-filing consultation and public outreach conducted is further detailed in Table 1: Summary of Pre-Filing Consultation and Public Outreach Meetings and Correspondence in Chapter 1 – Introduction.

CEQA Noticing and Outreach

In accordance with CEQA requirements, once SDG&E has filed their Administrative Draft EIR and Permit to Construct package with the CPUC, the CPUC would circulate the Notice of Preparation (NOP) for the Proposed Project for agencies and public review. Following circulation of the NOP and public scoping meetings, the Draft EIR would be circulated for public review and comment. Upon completion of the public review and comment period, a Final EIR would be prepared, inclusive of the comments received on the Draft EIR during the public review period. The Final EIR would also include responses to the comments.

AREAS OF CONTROVERSY

As discussed in the Pre-Filing Consultation and Public Outreach subsection, SDG&E met with several agencies and relevant stakeholders to solicit input on the design and potential resource and land use issues in the vicinity of the Proposed Project. No areas of significant controversy were identified through SDG&E's initial agency and stakeholder outreach. In addition to SDG&E's efforts, the CPUC conducted additional outreach and consultation with agencies and stakeholders to identify any areas of concern from the Proposed Project.

[CPUC TO COMPLETE THIS SECTION]

ISSUES TO BE RESOLVED

According to Section 15123(b)(3) of the CEQA guidelines, an EIR needs to identify the issues to be resolved, including the choice among alternatives and whether or how to mitigate significant environmental impacts. The issues to be resolved for the Proposed Project include the following:

[CPUC TO COMPLETE THIS SECTION]

SUMMARY OF IMPACTS

With the implementation of mitigation measures (MMs), no potentially significant or significant and unavoidable impacts are expected as a result of the Proposed Project. SDG&E would be responsible for overseeing the assembly of construction and environmental teams that would implement and evaluate the MMs for the Proposed Project. SDG&E maintains environmental

compliance management programs to allow for implementation of the measures to be monitored, documented, and enforced during each Proposed Project phase. The MMs included for the Proposed Project would reduce potential impacts to a less-than-significant level. The MMs are provided in Table ES-1: Summary of Impacts and Mitigation Measures.

SUMMARY OF ALTERNATIVES

Although further discussed in Chapter 6 – Alternatives and depicted in Attachment 6-C: Project Route Alternatives, the following reasonable range of alternatives has been evaluated in detail in this Administrative Draft EIR:

- **No-Project Alternative:** Assumes that the Proposed Project would not be constructed, including the double-circuit 230 kV transmission line, as well as modifications to the Suncrest Substation. The area would remain in its current condition.

- **Alternative Route 4:** Alternative Route 4 would connect with the existing SDG&E 230 kV TL23021 and continue east along Ridge Hill Road and Pecan Park Lane for 0.4 mile in an overhead configuration within or adjacent to an existing utility easement before transitioning to an underground configuration and turning southeast on Rios Canyon Road within or adjacent to an existing utility easement. Alternative Route 4 would travel along Rios Canyon Road in an underground configuration for approximately 0.8 mile within or adjacent to an existing utility easement before transitioning to an overhead configuration and traveling within or adjacent to an existing utility easement along Rios Canyon Road for approximately 0.4 mile. Alternative Route 4 would continue to travel east in an overhead configuration within or adjacent to an existing utility easement for approximately 1.3 miles. Alternative Route 4 would travel southeast in an overhead configuration within or adjacent to an existing utility easement for approximately 1 mile and would travel northeast in an overhead configuration for approximately 0.5 mile within or adjacent to an existing utility easement along Harbison Canyon Road.

Alternative Route 4B: Alternative Route 4B would primarily follow the same roads and utility easements as the Alternative Route 4 alignment but would be installed entirely in an underground configuration between the connection with the existing SDG&E 230 kV TL23021 and the east side of Rios Canyon Road. Approximately 0.1 mile northeast of the intersection of Galloway Valley Road and Harbison Canyon Road, Alternative Route 4B would deviate from Alternative Route 4, continuing on Harbison Canyon Road in an underground configuration for approximately 0.9 mile. Alternative Route 4B would then turn southeast on South Grade Road and travel along South Grade Road in an underground configuration for approximately 1 mile before rejoining Alternative Route 4. Alternative Route 4B would follow the underground segment of Alternative Route 4 in an underground configuration until it reaches the intersection of Tavern Road and Dehesa Road, where Alternative Route 4B would switch to an overhead configuration and continue to follow Alternative Route 4 before connecting to the existing Suncrest Substation. Alternative Route 4B would cross land owned or managed by the CDFW, Endangered Habitats Conservancy, Sweetwater Authority, and USFS.

Alternative Route 5: Alternative Route 5 would connect to the existing SDG&E 230 kV TL23021, cross Interstate 8, and continue within or adjacent to an existing utility easement along U.S. Route 80 (Old Highway 80) for approximately 3.9 miles in an underground configuration within or adjacent to an existing utility easement. Alternative Route 5 would travel southeast for approximately 2.5 miles along Alpine Boulevard, Arnold Way, and South Grade Road in an underground configuration primarily within or adjacent to an existing utility easement. Alternative Route 5 would then follow the Alternative Route 4 alignment in an underground configuration beginning near the intersection of South Grade Road and Rocrest Road. Approximately 0.1 mile south of Japatul Road, Alternative Route 5 would transition to an overhead configuration and continue to follow the Alternative Route 4 alignment primarily within or adjacent to an existing utility easement and connect to the existing Suncrest Substation. Alternative Route 5 would cross land owned or managed by Sweetwater Authority and the USFS.

REFERENCES

Association of Environmental Professionals. 2025. California Environmental Quality Act Statute & Guidelines.

CAISO. 2023. 2022-2023 Transmission Plan. Online. https://stakeholdercenter.caiso.com/RecurringStakeholderProcesses/2022-2023-Transmission-planning-process. Site visited August 2024.

California Legislative Information. 2025. Public Resources Code – PRC. Online. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=PRC&tocTitle=+Public+Resources+Code+-+PRC. Site visited April 2025.

CPUC. 2019. Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/c/6442463239-ceqa-pre-filing-guidelines-pea-checklist-nov-2019.pdf. Site visited April 2025.

SDG&E. 2025. About Us. Online. https://www.sdge.com/more-information/our-company/about-us. Site visited April 2025.

Table ES-1: Summary of Impacts and Mitigation Measures

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Aesthetics			
Impact AES-01: Would the project have a substantial adverse effect on a scenic vista?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact AES-02: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact AES-03: In nonurbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact AES-04: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Agriculture and Forestry Resources			
Impact AG-01: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact AG-02: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact AG-03: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact AG-04: Would the project result in the loss of forest land or conversion of forest land to non-forest use?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact AG-05: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Air Quality			
Impact AIR-01: Would the project conflict with or obstruct implementation of an applicable air quality plan?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact AIR-02: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact AIR-03: Would the project expose sensitive receptors to substantial pollutant concentrations?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI

[1] NI: No impact
LTS: Less than significant
S: Significant
SU: Significant and unavoidable

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Impact AIR-04: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Biological Resources			
Impact BIO-01: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<u>Special-Status Plant Species</u> Construction – S O&M – LTS <u>Special-Status Wildlife Species</u> *Amphibian Species* Construction – S O&M – LTS *Avian Species* Construction – S O&M – LTS *Butterflies* Construction – S O&M – LTS *Crotch's Bumble Bee* Construction – S O&M – LTS *Bat Species* Construction – LTS O&M – LTS *Other Mammal Species* Construction – S O&M – LTS *Reptile Species* Construction – S O&M – LTS *Southwestern Pond Turtle* Construction – S O&M – LTS	<u>Special-Status Plant Species</u> MM BIO-01. Conduct Supplemental Botanical Field Surveys. MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special - Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants). <u>Special-Status Wildlife Species</u> *Amphibian Species* MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians. Measures would be implemented to avoid and minimize impacts to special status amphibians from the Proposed Project. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *Avian Species* MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures. Measures would be implemented to avoid and minimize impacts to coastal California gnatcatcher from the Proposed Project. MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures. Measures would be implemented to avoid and minimize impacts to least Bell's vireo from the Proposed Project. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *Butterflies* MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measures. Measures would be implemented to avoid and minimize impacts to Hermes copper butterfly from the Proposed Project. MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat. MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures. Measures would be implemented to avoid and minimize impacts to Quino checkerspot butterfly from the Proposed Project. MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities.	<u>Special-Status Plant Species</u> Construction – LTS with Mitigation O&M – LTS <u>Special-Status Wildlife Species</u> *Amphibian Species* Construction – LTS with Mitigation O&M – LTS *Avian Species* Construction – LTS with Mitigation O&M – LTS *Butterflies* Construction – LTS with Mitigation O&M – LTS *Crotch's Bumble Bee* Construction – LTS with Mitigation O&M – LTS *Bat Species* Construction – LTS O&M – LTS *Other Mammal Species* Construction – LTS with Mitigation O&M – LTS *Reptile Species* Construction – LTS with Mitigation O&M – LTS *Southwestern Pond Turtle* Construction – LTS with Mitigation O&M – LTS

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	<u>USFWS-Designated Critical Habitat</u> Construction – S O&M – S	*Crotch's Bumble Bee* MM BIO-10. Crotch's Bumble Bee (CBB) Avoidance and Minimization Measures. Measures would be implemented to avoid and minimize impacts to Crotch's bumble bee from the Proposed Project. MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *Other Mammal Species* MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *Reptile Species* MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *Southwestern Pond Turtle* MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures. Measures would be implemented to avoid and minimize impacts to southwestern pond turtle from the Proposed Project. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. <u>USFWS Designated Critical Habitat</u> MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians. MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measures. MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities.	<u>USFWS-Designated Critical Habitat</u> Construction – LTS with Mitigation O&M – LTS with Mitigation
Impact BIO-02: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Construction – S O&M – LTS	MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities.	Construction – LTS with Mitigation O&M – LTS
Impact BIO-03: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Construction – S O&M – LTS	MM BIO-14. Mitigate for Permanent Impacts to Wetlands and Waters of the U.S. and the State.	Construction – LTS with Mitigation O&M – LTS
Impact BIO-04: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact BIO-05: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Impact BIO-06: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<u>San Diego County Water Authority Subregional Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)</u> Construction – S O&M – S <u>San Diego Multiple Species Conservation Program Plan (NCCP/HCP)</u> *City of El Cajon Subarea Plan* Construction – NI O&M – NI *City of La Mesa Subarea Plan* Construction – NI O&M – NI *City of Santee Subarea Plan* Construction – NI O&M – NI *City of San Diego Subarea Plan* Construction – NI O&M – NI *County of San Diego Subarea Plans* South County Multiple Species Conservation Program Subarea Plan Construction – S O&M – S East County Multiple Species Conservation Program Subarea Plan Construction – NI O&M – NI	<u>San Diego County Water Authority Subregional NCCP/HCP</u> MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. MM BIO-15. Coordination with Preserve or Proposed Preserve Managers. <u>San Diego Multiple Species Conservation Program Plan (NCCP/HCP)</u> *County of San Diego Subarea Plans* South County Multiple Species Conservation Program Subarea Plan. MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants). MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat. MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *SDG&E Company HCP Amendment* MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants). MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians. MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures. MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures. MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measures. MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat. MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities. *SDG&E Company Low-Effect HCP for Quino Checkerspot Butterfly* MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures. MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat.	<u>San Diego County Water Authority Subregional NCCP/HCP</u> Construction – LTS with Mitigation O&M – LTS with Mitigation <u>San Diego Multiple Species Conservation Program Plan (NCCP/HCP)</u> *City of El Cajon Subarea Plan* Construction – NI O&M – NI *City of La Mesa Subarea Plan* Construction – NI O&M – NI *City of Santee Subarea Plan* Construction – NI O&M – NI *City of San Diego Subarea Plan* Construction – NI O&M – NI *County of San Diego Subarea Plans* South County Multiple Species Conservation Program Subarea Plan Construction – LTS with Mitigation O&M – LTS with Mitigation East County Multiple Species Conservation Program Subarea Plan Construction – NI O&M – NI *SDG&E 1995 Subregional NCCP/HCP* Construction – NI O&M – NI

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
	SDG&E 1995 Subregional NCCP/HCP Construction – NI O&M – NI *SDG&E Company HCP Amendment* Construction – S O&M – S *SDG&E Company Subregional NCCP Amendment for Wildfire Safety Activities* Construction – NI O&M – NI *SDG&E Company Low-Effect HCP for Quino Checkerspot Butterfly* Construction – S O&M – S Southern California National Forests Land Management Plan – Part 2 CNF Strategy Construction – S O&M – S Sweetwater Authority NCCP/HCP Construction – NI O&M – NI	Southern California National Forests Land Management Plan – Part 2 CNF Strategy MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special - Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants). MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat. MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat. MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat. MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities.	*SDG&E Company HCP Amendment* Construction – LTS with Mitigation O&M – LTS with Mitigation *SDG&E Company Subregional NCCP Amendment for Wildfire Safety Activities* Construction – NI O&M – NI *SDG&E Company Low-Effect HCP for Quino Checkerspot Butterfly* Construction – LTS with Mitigation O&M – LTS with Mitigation Southern California National Forests Land Management Plan – Part 2 CNF Strategy Construction – LTS with Mitigation O&M – LTS with Mitigation Sweetwater Authority NCCP/HCP Construction – NI O&M – NI
Impact BIO-07: Create a Substantial Collision or Electrocution Risk for Birds or Bats	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Cultural Resources			
Impact CUL-01: Would the project cause a substantial adverse change in the significance of an historic resource pursuant to Section 15064.5?	Construction – S O&M – NI	MM CUL-01: Evaluate Historic Resources and Assess Impacts.	Construction – LTS with Mitigation O&M – NI
Impact CUL-02: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Construction – S O&M – NI	MM CUL-02: Cultural Resources Monitoring Plan.	Construction – LTS with Mitigation O&M – NI
Impact CUL-03: Would the project disturb, uncover, expose, and/or damage any human remains, including those interred outside of dedicated cemeteries?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Energy			
Impact EN-01: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact EN-02: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Geology, Soils, and Paleontological Resources			
Impact GEO-01: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact GEO-02: Would the project result in substantial soil erosion or the loss of topsoil?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact GEO-03: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact GEO-04: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact GEO-05: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact GEO-06: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Greenhouse Gas Emissions			
Impact GHG-01: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact GHG-02: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Hazards and Hazardous Materials			
Impact HAZ-01: Would the project create a risk to the public or the environment from the routine use, transport, storage, and disposal of hazardous materials?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact HAZ-02: Would the project create a risk to human health and the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact HAZ-03: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact HAZ-04: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Impact HAZ-05: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact HAZ-06: Would the project impair or interfere with an adopted emergency response plan or emergency evacuation plan?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact HAZ-07: Would the project expose people or structures to a significant risk of loss, injury, or death from wildland fires?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Hydrology and Water Quality			
Impact HYD-01: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact HYD-02: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact HYD-03: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-site or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact HYD-04: In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact HYD-05: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Land Use and Planning			
Impact LAN-01: Would the project physically divide an established community?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact LAN-02: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Mineral Resources			
Impact MIN-01: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact MIN-02: Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Noise			
Impact NOI-01: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Construction – S O&M – LTS	MM NOI-01: Construction Noise Reduction Measures.	Construction – LTS with Mitigation O&M – LTS
Impact NOI-02: Would the project generate excessive ground-borne vibration or ground-borne noise levels?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Impact NOI-03: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Population and Housing			
Impact POP-01: Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes or business) or indirectly (e.g., through extension of roads or other infrastructure)?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Impact POP-02: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Public Services			
Impact PUB-01: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives?	<u>Fire Protection</u> Construction – LTS O&M – LTS <u>Police Protection</u> Construction – NI O&M – NI <u>Schools, Parks, or Other Public Facilities</u> Construction – LTS O&M – LTS	No mitigation is required for this impact.	<u>Fire Protection</u> Construction – LTS O&M – LTS <u>Police Protection</u> Construction – NI O&M – NI <u>Schools, Parks, or Other Public Facilities</u> Construction – LTS O&M – LTS
Recreation			
Impact REC-01: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact REC-02: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Transportation			
Impact TRA-01: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Construction – S O&M – LTS	MM TRA-01: Traffic Control Plan and Safe Transport.	Construction – LTS with Mitigation O&M – LTS
Impact TRA-02: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact TRA-03: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact TRA-04: Would the project result in inadequate emergency access?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Tribal Cultural Resources			
Impact TRIB-01: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Utilities and Service Systems			
Impact UTL-01: Would the project result in relocated, new, or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities that could cause significant environmental effects?	<u>Water</u> Construction – LTS O&M – NI <u>Wastewater and Storm Water</u> Construction – LTS O&M – NI <u>Electric Power and Natural Gas</u> Construction – LTS O&M – NI <u>Telecommunications</u> Construction – LTS O&M – NI	No mitigation is required for this impact.	<u>Water</u> Construction – LTS O&M – NI <u>Wastewater and Storm Water</u> Construction – LTS O&M – NI <u>Electric Power and Natural Gas</u> Construction – LTS O&M – NI <u>Telecommunications</u> Construction – LTS O&M – NI
Impact UTL-02: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact UTL-03: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact UTL-04: Would the project exceed capacity of solid waste facilities and be incompliant with solid waste statutes and regulations?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact UTL-05: Would the project not comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Construction – NI O&M – NI	No mitigation is required for this impact.	Construction – NI O&M – NI
Wildfire			
Impact FIRE-01: If located in or near SRA lands or lands classified as very high FHSZ, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Construction – LTS O&M – NI	No mitigation is required for this impact.	Construction – LTS O&M – NI
Impact FIRE-02: If located in or near SRA lands or lands classified as very high FHSZ, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS

Impact	Significance[1] Before Mitigation	Mitigation Measure(s)	Significance After Mitigation
Impact FIRE-03: If located in or near SRA lands or lands classified as very high FHSZ, would the project require the installation or maintenance of associated infrastructure (e.g., roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS
Impact FIRE-04: If located in or near SRA lands or lands classified as very high FHSZ, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Construction – LTS O&M – LTS	No mitigation is required for this impact.	Construction – LTS O&M – LTS

CHAPTER 1 – INTRODUCTION

This Administrative Draft Environmental Impact Report (EIR) evaluates the environmental impacts of the Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project). The Administrative Draft EIR has been prepared under the direction of the California Public Utilities Commission (CPUC) in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), the Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-Filing and Proponent's Environmental Assessments, the CEQA Guidelines (Title 14 California Code of Regulations Section 15000, et seq.), and CPUC General Order (GO) 131-E. Consultation and permitting in compliance with federal regulations will be conducted by SDG&E for the Proposed Project through a separate process.

1.1 PROJECT REQUIRING ENVIRONMENTAL ANALYSIS

The California Independent System Operator (CAISO) 2022-2023 Transmission Plan identified the need for the Proposed Project to upgrade the California electric grid to accommodate load growth. The Proposed Project would also address CAISO-identified reliability constraints (i.e., operational challenges and thermal overloads) on San Diego Gas & Electric Company's (SDG&E's) existing Transmission Line (TL) 23054 and TL23055 from SDG&E's existing Suncrest Substation to the existing Sycamore Canyon Substation, as well as the existing transformers at the existing Suncrest Substation. In addition, the Proposed Project would help supply the increase in forecasted load related to regional electrification. The Proposed Project would involve the construction of an approximately 14.5-mile-long, double-circuit 230 kV transmission line segment consisting of overhead and underground configurations to loop-in SDG&E's existing TL23021 to the Suncrest Substation. In addition, the Proposed Project would include modifications to SDG&E's existing Suncrest Substation.

1.2 PURPOSE OF THIS ADMINISTRATIVE DRAFT EIR

This Administrative Draft EIR has been prepared to meet the requirements of a project EIR as defined by Section 15161 of the CEQA Guidelines. According to CEQA, an EIR is required when it can be fairly argued, based on substantial evidence, that a proposed project may result in a significant environmental impact. An EIR is prepared to inform both the general public and public agency decision makers of the potential significant environmental impacts of a proposed project, identify measures to minimize the significant impacts, and evaluate a reasonable range of alternatives to the proposed project that could still meet the basic objectives of the proposed project while substantially lessening or avoiding the significant impacts.

Under CEQA, public agencies are required to consider the information presented in the EIR when determining whether to approve a proposed project. For the Proposed Project, the CPUC is the lead agency under CEQA with primary authority to determine whether to approve the Proposed Project and issue a Permit to Construct (PTC) to SDG&E. GO 131-E, Section III-B provides the criteria for the issuance of a PTC.

1.3 SCOPE OF THIS ADMINISTRATIVE DRAFT EIR

An evaluation of the following environmental resource areas is included in this Administrative Draft EIR, as well as other CEQA-mandated issues (e.g., cumulative impacts, growth-inducing impacts, significant and unavoidable impacts, and alternatives analysis):

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology, Soils, and Paleontological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

1.4 AGENCY CONSULTATION, PUBLIC OUTREACH, AND REVIEW

1.4.1 Pre-Filing Consultation and Public Outreach

SDG&E met with several regulatory agencies and relevant stakeholders in the early planning stages of the Proposed Project to solicit input on Proposed Project design and potential resource and land use issues in the vicinity. Table 1-1: Summary of Pre-Filing Consultation and Public Outreach Meetings and Correspondence summarizes the agency meetings and correspondence that took place during the development of this Administrative Draft EIR and the associated PTC application.

Coordination with these agencies and stakeholders would continue through the Proposed Project's planning process, and applications for ministerial and discretionary permits would be prepared and submitted as necessary. No local discretionary (e.g., land use) permits are required because the CPUC has preemptive jurisdiction over the siting, construction, and operations and maintenance of SDG&E facilities in California.

Table 1-1: Summary of Pre-Filing Consultation and Public Outreach Meetings and Correspondence

Agency	Meeting/ Correspondence Date(s)	Attendees	Summary of Discussions
CPUC	January 31, 2025	CPUC, SDG&E, and Insignia Environmental (Insignia) Staff	Initial pre-filing meeting was held for SDG&E to present the Proposed Project need and scope, a map of the preliminary Proposed Project location, potential public outreach, and next steps.
	March 14, 2025 through March 27, 2026	CPUC, ECORP Consulting, Inc. (ECORP), SDG&E, and Insignia Staff	Biweekly meetings have been held to discuss the Proposed Project, public outreach, schedule, agency coordination, GO 131-E, and CEQA compliance.
United States (U.S.) Forest Service (USFS) Cleveland National Forest (CNF)	February 3, 2025	USFS and SDG&E Staff	SDG&E presented the Proposed Project to the USFS to begin the coordination process as the Proposed Project traverses land on CNF. SDG&E described the Proposed Project need and scope, provided a map of the preliminary Proposed Project location, described potential environmental resources, identified the CEQA and National Environmental Policy Act (NEPA) permitting pathways, and presented the preliminary Proposed Project schedule.
	April 23, 2025 and June 5, 2025	Not Applicable (N/A)	ASM Affiliates, Inc. (ASM) contacted the USFS on April 23, 2025 to request a cultural records search of the Area of Potential Effect on CNF. The USFS provided results of the records search to ASM on June 5, 2025.
	June 6, 2025	USFS and SDG&E Staff	USFS and SDG&E discussed NEPA compliance and potential permitting pathways.
	June 9, 2025	USFS and ASM Staff	ASM conducted an in-person records search with the USFS CNF Heritage Program Manager to review undigitized documents and reports.
	November 19, 2025, January 13, 2026, and March 10, 2026	USFS and SDG&E Staff	USFS and SDG&E discussed NEPA compliance and potential permitting pathways.
	March 27, 2026	USFS, CPUC, ECORP, and SDG&E Staff	USFS, CPUC, and SDG&E discussed coordination for CEQA and NEPA compliance.

Agency	Meeting/ Correspondence Date(s)	Attendees	Summary of Discussions
Sweetwater Authority	March 17, 2025 and March 27, 2025	Sweetwater Authority, SDG&E, and Insignia Staff	SDG&E presented the Proposed Project to Sweetwater Authority to begin the coordination process as the Proposed Project traverses land owned by Sweetwater Authority. SDG&E described the Proposed Project need and scope and provided a map of the preliminary Proposed Project location as well as the preliminary Proposed Project schedule.
County of San Diego (County)	April 4, 2025	N/A	SDG&E contacted the County to begin the coordination process as the Proposed Project traverses County-owned land. SDG&E described the Proposed Project and provided a map of the preliminary Proposed Project location.
	July 15, 2025	N/A	SDG&E briefed the County on Proposed Project. SDG&E described the Proposed Project and provided a map of the preliminary proposed alignment.
California Department of Fish and Wildlife (CDFW)	April 8, 2025	N/A	SDG&E contacted the CDFW to begin the coordination process as the Proposed Project traverses CDFW-managed land (i.e., Crestridge Ecological Preserve). SDG&E described the Proposed Project and provided a map of the preliminary Proposed Project location.
	September 9, 2025	CDFW and SDG&E Staff	CDFW and SDG&E discussed the Proposed Project, including the proposed easement on Crestridge Ecological Preserve.
	October 9, 2025	CDFW, CPUC, ECORP, and SDG&E Staff	
	March 20, 2026	CDFW, CPUC, ECORP, SDG&E, and Insignia Staff	SDG&E presented the Proposed Project alternatives and provided a map of the Proposed Project alternatives to the CDFW.

Agency	Meeting/ Correspondence Date(s)	Attendees	Summary of Discussions
U.S. Fish and Wildlife Service (USFWS)	April 18, 2025	USFWS, SDG&E, and Insignia Staff	SDG&E presented the Proposed Project to USFWS to discuss the Federal Endangered Species Act consultation process as the Proposed Project has the potential to impact federally listed species. SDG&E described the Proposed Project need and scope, provided a map of the preliminary Proposed Project location, presented the preliminary Proposed Project schedule, identified the special-status species with a potential to occur, and discussed potential amendments to SDG&E's Habitat Conservation Plan (HCP) Amendment and Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly.
	January 8, 2026 and March 18, 2026	USFWS and SDG&E Staff	USFWS and SDG&E discussed the Proposed Project and potential permitting pathways.
Native American Heritage Commission (NAHC)	August 30, 2024 and March 19, 2025	N/A	ASM contacted the NAHC on August 30, 2024 and March 19, 2025 to request cultural records searches of the Area of Potential Effect in the Sacred Lands File (SLF). The NAHC responded on November 7, 2024 and April 3, 2025 and provided the SLF search results as well as a list of contacts representing 13 tribes with traditional affiliations to the area. On March 19, 2025 and April 3, 2025, ASM sent letters to the tribal contacts to notify representatives of the Proposed Project and to request any information of known Native American cultural resources. As of April 25, 2025, 13 responses have been received. Additional details on tribal consultation efforts conducted to date are provided in Section 3.19 Tribal Cultural Resources.
City of El Cajon	December 3, 2025	City of El Cajon and SDG&E Staff	SDG&E contacted the City of El Cajon and briefed the engineering department about the Proposed Project. The City of El Cajon confirmed that the undergrounding portion did not fall into City of El Cajon boundaries but appreciated the outreach in case property owners reach out. SDG&E provided the link to the Proposed Project webpage and fact sheet.

The CPUC's authority does not preempt special districts, such as Air Quality Management Districts, other state agencies, or the federal government. SDG&E would obtain all ministerial permits (e.g., encroachment permits) from local jurisdictions. SDG&E would obtain permits, approvals, and licenses and would participate in reviews and consultations as needed with federal, state, and local agencies. No approved or pending housing developments that would coincide or conflict with Proposed Project activities have been identified.

On March 24, 2025, SDG&E began notifying residents and property owners about environmental surveys associated with the Proposed Project through mailers, phone calls, and door hangers. Throughout the approval process, SDG&E would continue to inform stakeholders about the scope of the Proposed Project through printed materials, person-to-person meetings, and presentations to local organizations.

1.5 PUBLIC REVIEW PROCESS

In accordance with the CEQA Guidelines, once SDG&E has filed this EIR and PTC package with the CPUC, the CPUC would use its independent discretion to review and deem the document complete. The CPUC would then circulate a Notice of Preparation (NOP) of an EIR for the Proposed Project. The NOP would be filed with the County clerk, as well as sent to the Office of Land Use and Climate Innovation (formerly known as the Office of Planning and Research) and with each responsible and trustee agency. In addition, the NOP would be circulated to interested organizations and to the general public. During the 30-day public review period of the NOP, public scoping meetings would be held to solicit input on the scope of analysis to be addressed in the draft environmental document.

After the public scoping period, and once the Draft EIR is complete, the Draft EIR and a Notice of Completion would be provided to the California State Clearinghouse. In addition, a Notice of Availability would be filed with the County clerk and published publicly to begin the public review and comment of the Draft EIR for a period of no less than 45 days. During this period, comments from agencies, organizations, and the general public, may be submitted to the CPUC. Upon completion of the public review and comment period, the comments would be considered and a Final EIR would be prepared. The Final EIR would also include responses to the comments.

Before the Proposed Project can be approved, the CPUC is required to certify that the EIR has been completed in compliance with CEQA, that all information in the EIR was reviewed and considered, and that the EIR reflects its independent judgment. The CPUC may also determine it is appropriate to issue Findings and, potentially, adopt a Statement of Overriding Considerations.

1.6 ADMINISTRATIVE DRAFT EIR ORGANIZATION

This Administrative Draft EIR is organized into chapters, as identified and briefly described as follows:

- **Executive Summary**. This chapter provides a Proposed Project summary, land ownership and ROW requirements, areas of controversy, summary of impacts including

potentially significant impacts, a summary of alternatives considered, and a pre-filing consultation and public outreach summary.

- **Chapter 1 – Introduction**. This chapter provides a detailed description of type, purpose, and intended uses of this Administrative Draft EIR, the scope of this Administrative Draft EIR, agency coordination, and the public review process.

- **Chapter 2 – Project Description**. This chapter provides a detailed description of the Proposed Project's background, location, purpose and need, components, objectives, anticipated permits, and the anticipated construction schedule if a build alternative is selected.

- **Chapter 3 – Environmental Impacts and Mitigation Measures**. This chapter includes a description of the environmental setting, regulatory setting, and potential impact analysis for each identified or relevant resource area.

- **Chapter 4 – Cumulative Impacts**. This chapter discusses the potential cumulative impacts from the Proposed Project.

- **Chapter 5 – Other CEQA Considerations**. This chapter discusses the energy and growth-inducing impacts from the Proposed Project.

- **Chapter 6 – Alternatives**. The chapter identifies and evaluates alternatives to the Proposed Project, including alternatives that were considered but not chosen for further consideration, the No-Proposed Project alternative, and alternatives that were carried forward for further analysis and consideration. These alternatives may allow for the lessening of potentially significant impacts when compared to other alternatives that were not carried forward. The alternatives analysis provides a general ranking of the alternatives in order of potentially significant environmental impacts.

- **Chapter 7 – List of Preparers**. This chapter provides a list of authors and reviewers for this Administrative Draft EIR, as well as their organizations.

1.7 STANDARD TERMINOLOGY

This Administrative Draft EIR uses the following standard terminology:

- **No Impact:** No impact was identified to the identified resource as a result of the Proposed Project.

- **Less-than-Significant Impact:** Some impacts may result from the Proposed Project; however, they were determined to be less than significant. Impacts are frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource. A less-than-significant impact applies when the environmental impact does not exceed the significance threshold or, with the proper mitigation measures, the impacts have been reduced to less than significant.

- **Less-than-Significant Impact with Mitigation Incorporated:** Significant adverse impacts may occur; however, with the application of enforceable mitigation, the impacts would be reduced to less than significant.

- **Potentially Significant Impact:** Adverse impacts may be significant even after mitigation measures have been incorporated into the Proposed Project to minimize their severity. A potentially significant or significant impact applies when the environmental impact exceeds the significance threshold, or substantial evidence in the record of proceedings was lacking which would allow the CPUC to make a less-than-significant impact determination.

CHAPTER 2 – PROJECT DESCRIPTION

This chapter describes the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) location, objectives, purpose and need, components, and construction activities. As depicted in Figure 2-1: Proposed Project Overview Map, the Proposed Project includes the installation of an approximately 14.5-mile long double-circuit[1] 230 kV transmission line (proposed 230 kV transmission line), as well as modifications to the existing Suncrest Substation to loop-in SDG&E's existing Transmission Line (TL) 23021 into the existing Suncrest Substation. This chapter provides an overview of the existing electric system, describes how the Proposed Project would be implemented, and explains the Proposed Project's place within California's existing and planned electrical transmission system. This chapter also identifies any permits or other approvals that may be needed to implement the Proposed Project. Lastly, this chapter identifies Applicant-Proposed Measures (APMs) proposed by SDG&E to avoid or minimize potentially significant environmental impacts.

2.1 PROJECT OVERVIEW

The Proposed Project includes the following main components:

- Construction of a proposed approximately 14.5-mile-long, double-circuit 230 kV transmission line segment consisting of overhead and underground configurations as described previously to loop-in SDG&E's existing TL23021 to the existing Suncrest Substation.

- Modifications inside the existing Suncrest Substation, which would occur within the existing substation property include the following:

  – installation of a 500/230 kV transformer bank and associated tertiary reactors, circuit breakers, disconnects, and communication equipment; and
  – construction of a 230 kV bay to accommodate the loop-in of TL23021 to the existing Suncrest Substation.

2.2 PROJECT LOCATION

The Proposed Project would cross unincorporated communities within San Diego County, California, including Crest and Harbison Canyon. As depicted in Attachment 2-A: Detailed Route Map, the proposed 230 kV western underground (UG) segment of the double-circuit 230 kV transmission line route would start within Vista De Montemar, on land managed by the California Department of Fish and Wildlife (CDFW) in unincorporated San Diego County. The proposed 230 kV western UG segment would continue southeast within Vista De Montemar for approximately 0.3 mile until reaching La Cresta Road. From there, the proposed 230 kV western UG segment would turn east to La Cresta Road and continue in an easterly direction within the right-of-way (ROW) for approximately 1.7 miles until reaching Mountain View Road. The

[1] A double-circuit transmission line is comprised of two independent circuits on the same structure, with each circuit including three conductors. A single-circuit transmission line is comprised of one independent circuit with three conductors.

proposed 230 kV western UG segment would continue in a northeasterly direction on Mountain View Road within the County road ROW for approximately 0.3 mile until turning south to Al Bahr Road, a private road. The proposed 230 kV western UG segment would continue within Al Bahr Road through private land for approximately 0.4 mile until turning east to Canyon Rim Drive, a private road. Following Canyon Rim Drive through private land, the proposed 230 kV western UG segment would continue southeast for approximately 0.2 mile until transitioning to transition structures at the start of the western end of the proposed 230 kV overhead (OH) segment. Additional information on transition structures is provided in the Transition Structures subsection of Section 2.6.1.1.2 230 Kilovolt Overhead Segment.

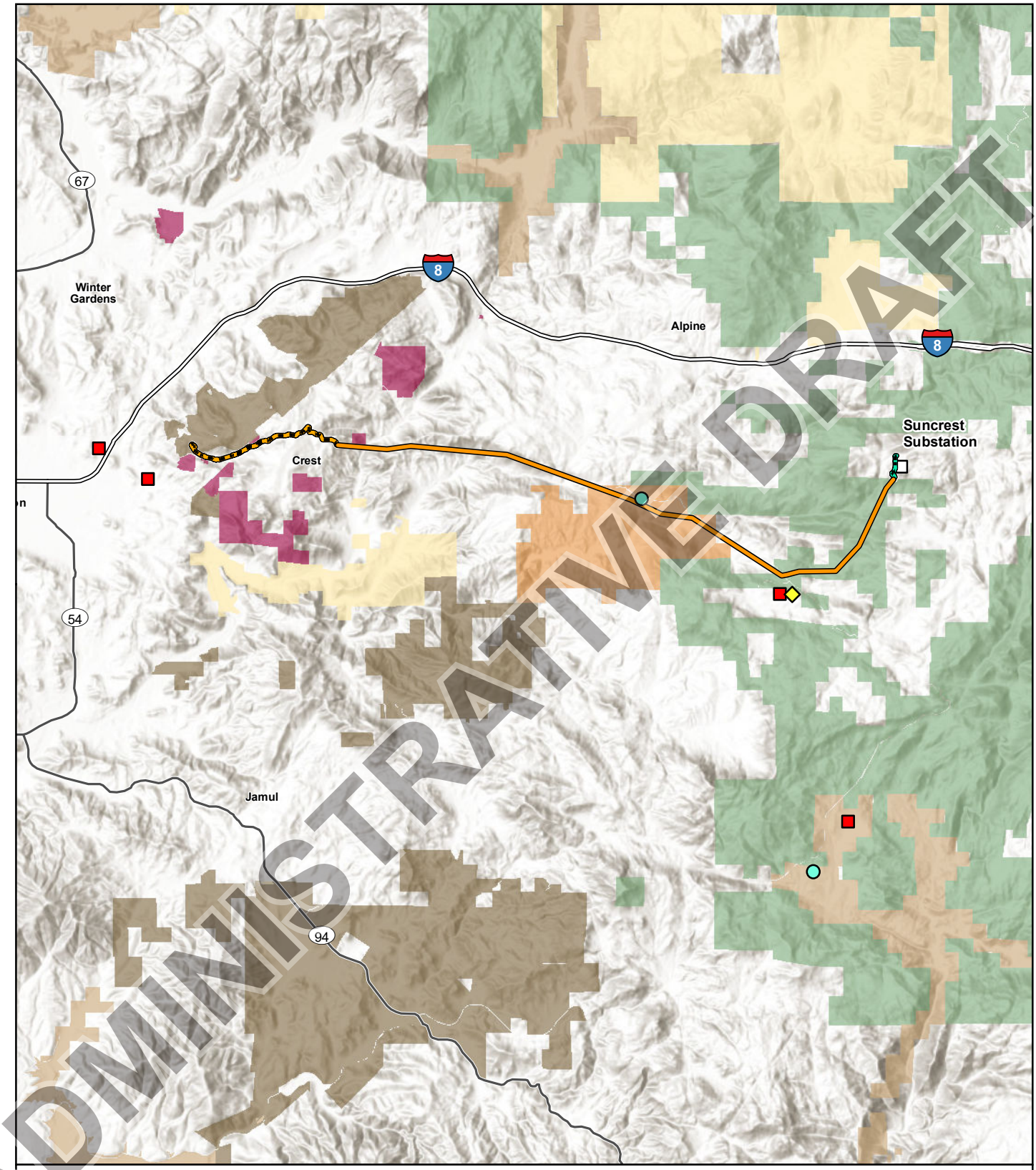
At this point, the proposed 230 kV OH segment would traverse cross-country terrain in a southeasterly direction across private land, including open space easements (e.g., the Endangered Habitats Conservancy)[2], for approximately 4.5 miles before entering land managed and/or owned by Sweetwater Authority. The proposed 230 kV OH segment would continue southeast through Sweetwater Authority land for approximately 2.3 miles and through private land, including open space easements[3], for approximately 1.2 miles. The segment would generally parallel Japatul Road until entering the Cleveland National Forest (CNF), which is land managed by the United States (U.S.) Forest Service (USFS). The proposed 230 kV OH segment would continue through the CNF in a northeasterly direction for approximately 3 miles and then enter land owned by SDG&E. The proposed 230 kV OH segment would then transition to the proposed 230 kV eastern UG segment where it would continue within SDG&E land for approximately 0.4 mile and loop into the existing Suncrest Substation.

2.3 PROJECT BACKGROUND AND NEED

The California Independent System Operator (CAISO) is responsible for planning and managing the high-voltage transmission network (transmission grid) for approximately 80 percent of California, including the service territory of SDG&E, where the Proposed Project is located. CAISO undertakes an annual transmission planning process to develop a transmission plan that identifies potential transmission system deficiencies (e.g., lack of capacity, thermal overloading or voltage and frequency variations outside acceptable limits) over a 10-year planning horizon. CAISO considers additional transmission facilities and/or changes in operations which would mitigate or solve the identified deficiencies, allowing the transmission grid to meet reliability objectives and criteria.

The CAISO 2021-2022 Transmission Plan added more than 4,000 megawatts of new resources per year, requiring the need for additional reliability projects across the electrical grid to accommodate those new resources. CAISO's Reliability Assessment (as included in the 2022-2023 Transmission Plan) recommended the Proposed Project, which was approved by CAISO's Board of Governors on May 18, 2023. The CAISO transmission planning process, including the Reliability Assessment, identifies facilities that demonstrate the potential of not meeting the applicable reliability performance requirements and needed reliability solutions to ensure that

[2] The Proposed Project would traverse approximately 0.20 mile of land managed by the Endangered Habitats Conservancy.
[3] Private easements are typically held by individual landowners or in a trust.



ADMINISTRATIVE DRAFT

Figure 2-1: Proposed Project Overview Map — **Suncrest 230 Kilovolt Loop-In Project**

- Existing Suncrest Substation
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Interstate
- Major Road/State Highway

Landownership

- California Department of Fish and Wildlife
- City of San Diego
- United States Forest Service
- Endangered Habitats Conservancy
- Sweetwater Authority
- Bureau of Indian Affairs

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transmission system performance complies with all North American Electric Reliability Corporation (NERC) standards, Western Electricity Coordinating Council regional criteria, and CAISO transmission planning standards. The CAISO planning process also reviews alternative means to meet the identified deficiencies and it was determined the Proposed Project would best meet the identified constraints and policy goals. The Proposed Project would comply with transmission system performance and planning standards.

The CAISO 2022-2023 Transmission Plan identified the Proposed Project as a needed upgrade to the California electric grid to mitigate identified system reliability constraints (i.e., operational challenges and thermal overloads) on the Suncrest-Sycamore Canyon 230 kV transmission lines (i.e., TL23054 and TL23055) and the Suncrest 500/230 kV bank, as detailed in Chapter 1 – Introduction. Even without the additional resources, current reliability constraints presently exist on SDG&E's existing TL23054 and TL23055 between the existing Suncrest Substation and the existing Sycamore Canyon Substation, as well as at the existing transformers at the existing Suncrest Substation. The Proposed Project would help to address both the existing deficiencies as well as to accommodate the new resources identified in the CAISO 2022-2023 Transmission Plan.

2.4 PROJECT PURPOSE AND OBJECTIVES

The purpose of the Proposed Project is to address operational challenges and thermal overloads on SDG&E's existing transmission lines from the Suncrest Substation to the Sycamore Canyon Substation and existing transformers at the Suncrest Substation, as identified by CAISO in its 2022-2023 Transmission Plan. To meet the Proposed Project purpose, the Proposed Project includes the following objectives:

- meet SDG&E's obligation to implement the CAISO-approved project;
- improve system reliability for SDG&E's approximately 3.7 million energy customers as well as the electrical grid as a whole;
- increase capacity to meet the forecasted load demands related to electrification;
- address operational challenges and thermal overloads on SDG&E's existing transmission lines (i.e., TL23054 and TL23055);
- address operational challenges and thermal overloads on existing transformers at SDG&E's existing Suncrest Substation;
- achieve commercial operation by 2032 to timely address critical reliability issues within the transmission system;
- locate the Proposed Project on land adjacent to SDG&E's existing ROW or existing utility uses, or otherwise avoid, mitigate or minimize significant environmental impacts in a manner consistent with prudent transmission planning to the extent practicable;
- construct, operate, and maintain the facility with safety as a top priority;

- maintain compliance with NERC standards; and
- avoid or mitigate significant adverse impacts to both the environment and community to achieve a project that is designed for the greatest public good and least private injury.

2.5 EXISTING ELECTRICAL SYSTEM

2.5.1 Existing Electrical System Users

The Proposed Project is located within SDG&E's existing service territory and regional transmission system that provides electricity to San Diego County as well as a portion of southern Orange County, California, which is identified as the SDG&E Planning Area.

2.5.2 Existing Electrical System Components

SDG&E's existing electrical infrastructure in the Proposed Project vicinity includes, but is not limited to five 69 kV transmission lines, one 500 kV transmission line, two 230 kV transmission lines, and five substations. The existing infrastructure is discussed in more detail in the following subsections.

The existing system, including the Suncrest Substation, serves as one of the major interconnection points for energy resources from the Imperial Valley area to greater San Diego County through existing 500 kV and 230 kV transmission lines. A schematic diagram of the existing utility system is provided in Figure 2-2: Existing System Line Diagram.

2.5.2.1 Transmission Lines

Specifications for SDG&E's existing transmission lines are provided in Table 2-1: Existing Transmission Lines.

2.5.2.2 Substations

Specifications for SDG&E's existing substations are provided in Table 2-2: Existing Substation Specifications.

2.5.2.2.1 Alpine Substation

The substation contains a single 69/12 kV yard consisting of two 69 kV transmission lines, two 69/12 kV transformers, and five distribution circuits.

2.5.2.2.2 Loveland Substation

The substation contains a single 69/12 kV yard consisting of four 69 kV transmission lines, one 69/12 kV transformer, and two distribution circuits.

2.5.2.2.3 Miguel Substation

The substation contains two facilities, including a 230/138/69 kV substation and a 500/230 kV transformer yard. The 230/138/69 kV substation consists of two 230/138 kV transformers, two 230/69 kV transformers, seven 230 kV transmission lines, two 138 kV transmission lines, and five 69 kV transmission lines. The 500/230 kV transformer yard consists of one 500 kV transmission line, a 500 kV Gas Insulated Switchgear (GIS) building, and two 500/230 kV transformers.

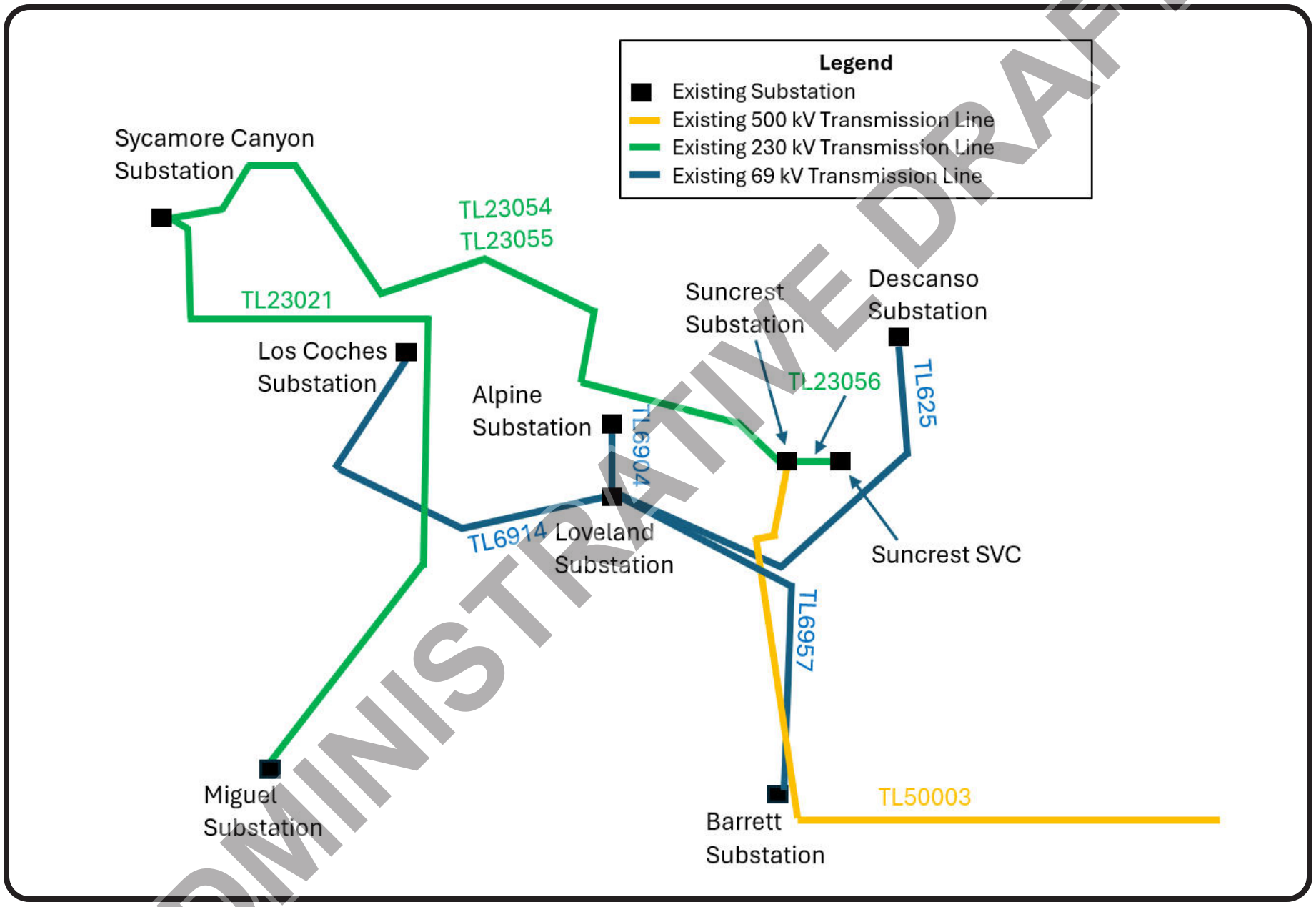

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Figure 2-2: Existing System Line Diagram

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Table 2-1: Existing Transmission Lines

Transmission Line	Voltage (kV)	Approximate Length (miles)	Location
TL625	69	15.6	Runs from the Descanso Substation to the Loveland Substation.
TL6904	69	2.4	Runs from the Alpine Substation to the Loveland Substation.
TL6914	69	11.7	Runs from the Loveland Substation to the Los Coches Substation.
TL6957	69	13.6	Runs from the Loveland Substation to the Barrett Substation.
TL678	69	8.0	Runs from the Los Coches Substation to the Alpine Substation.
TL23021	230	28.9	Runs from the Sycamore Canyon Substation to the Miguel Substation.
TL23056	230	1.0	Runs from the Suncrest Substation to the Suncrest SVC Substation.
TL50003 (Sunrise Powerlink)	500	117.0	Runs from the Imperial Valley Substation to the Suncrest Substation. In addition, there are two segments of 230 kV transmission line, including one that runs from the Suncrest Substation to the unincorporated community of Alpine in San Diego County, and another that starts west of Alpine and runs to the Sycamore Canyon Substation.

Table 2-2: Existing Substation Specifications

Substation Name	Substation Component	Approximate Size (acres)	Approximate Length (feet)	Approximate Width (feet)	Location
Alpine Substation	69/12 kV Substation	0.87	220	173	Unincorporated San Diego County, off South Grade Road and southwest of the intersection of South Grade Road and Foss Road.
Loveland Substation	69/12 kV Substation	0.44	148	128	Unincorporated San Diego County and north of Loveland Reservoir off Sequan Truck Trail.
Miguel Substation	230/138/69 kV Substation	8.40	655	615	Unincorporated San Diego County and south of Sweetwater Reservoir off San Miguel Road.
	500/230 kV Transformer Yard	3.86	665	270	
Suncrest Substation	500/230 kV Substation	36.8	1,691	947	Unincorporated San Diego County, off Bell Buff Truck Trail, south of Interstate 8, and east of Palo Verde Lake.
Sycamore Canyon Substation	230/138/69 kV Substation	13.7	991	602	U.S. Marine Corps Air Station Miramar, off Spring Canyon Road.

2.5.2.2.4 Suncrest Substation

The substation contains a single 500/230 kV yard consisting of one 500 kV transmission line, one 500 kV series compensation yard, two 500/230 kV transformers, and three 230 kV transmission lines.

2.5.2.2.5 Sycamore Canyon Substation

The substation contains a single 230/138/69 kV yard consisting of one 230/138 kV transformer, three 230/69 kV transformers, six 230 kV transmission lines, three 138 kV transmission lines, and six 69 kV transmission lines.

2.6 PROPOSED PROJECT

The Proposed Project would address transmission deficiencies identified by CAISO by providing an additional supply path to greater San Diego County. As part of the Proposed Project, a double-circuit 230 kV transmission line would be installed to interconnect SDG&E's existing TL23021 into the Suncrest Substation. The proposed 230 kV transmission line and associated modifications to the Suncrest Substation to support the transmission line would create a loop for system reliability.

Figure 2-3: Proposed System Line Diagram depicts how the facilities would be configured after implementation of the Proposed Project. These Proposed Project components are described in more detail under the subheadings that follow and depicted in Attachment 2-A: Detailed Route Map. No changes to the electrical distribution system are expected as part of the Proposed Project; the same energy users would be served by the Proposed Project's system configurations.

2.6.1 Proposed Electrical System Components

Attachment 2-A: Detailed Route Map identifies the locations of the major Proposed Project components, as well as work areas and access roads that would be necessary to construct the Proposed Project.

2.6.1.1 230 kV Transmission Line

The proposed double-circuit 230 kV transmission line would be approximately 14.5 miles long and constructed between TL23021 and the Suncrest Substation. The proposed 230 kV transmission line would be installed during a single phase of construction and would consist of the following segments, as depicted in Figure 2-1: Proposed Project Overview Map:

- Proposed 230 kV Western UG Segment: This approximately 3.1-mile-long segment would be installed within proposed underground duct banks beginning from TL23021 until reaching proposed riser structures located southeast of Canyon Rim Drive at the start of the 230 kV OH segment.

- Proposed 230 kV OH Segment: This approximately 11.0-mile-long segment would be supported by approximately 67 tubular steel poles (TSPs) consisting of tangent and dead

end (i.e., strain dead end and terminal dead end) configurations[4]. The 230 kV OH segment would start at the end of the proposed 230 kV western UG segment and would terminate into the proposed 230 kV eastern UG segment.

- Proposed 230 kV Eastern UG Segment: This approximately 0.5-mile-long segment would be installed within proposed underground duct banks beginning from the riser structures located at the end of the proposed 230 kV OH segment and would terminate and integrate into the Suncrest Substation.

These segments are described in more detail in the subsections that follow. For illustrative purposes, a typical drawing of the structures to be installed for the proposed 230 kV transmission line is provided as Figure 2-4: 230 kV Transmission Line Structures Typical Drawing.

2.6.1.1.1 230 Kilovolt Underground Segment

The proposed 230 kV UG segments would involve the construction of two underground duct banks and approximately 22 underground utility vaults along with approximately six (6) riser structures (i.e., cable poles).

Vaults

To facilitate pulling and splicing of the underground cables, vaults measuring approximately 10 feet wide, approximately 24 feet long, and approximately 8 feet deep, would be installed in line with the underground duct banks, as depicted in Figure 2-5: Utility Vault Typical Drawing. These vaults would also provide access to the underground cables for maintenance, inspection, and repair during operation. During trenching activities, which are further discussed in Section 2.6.3.6.1 Trenching, the trench would be widened at the underground vault locations to allow approximately 2 feet of additional clearance. The pre-formed, steel-reinforced, precast concrete splice vaults would be delivered to the Proposed Project site on flatbed trucks and lowered into place using small truck-mounted cranes. The splice vaults would then be connected to the underground duct banks before being covered with at least 3 feet of compacted fill. The surface above the vaults would be repaved or restored to their pre-construction condition as appropriate. The vaults would be designed to withstand heavy truck traffic loading (if within a roadway).

Duct Banks

As depicted in Figure 2-6: Underground Duct Bank Typical Drawing, a concrete-encased double duct bank system would be used to house the proposed double-circuit 230 kV transmission line and fiber optic cable (i.e., optical ground wire). Each duct bank would be approximately 3 feet wide and 5 feet 7 inches tall.

[4] Terminal dead end configurations consist of two poles.

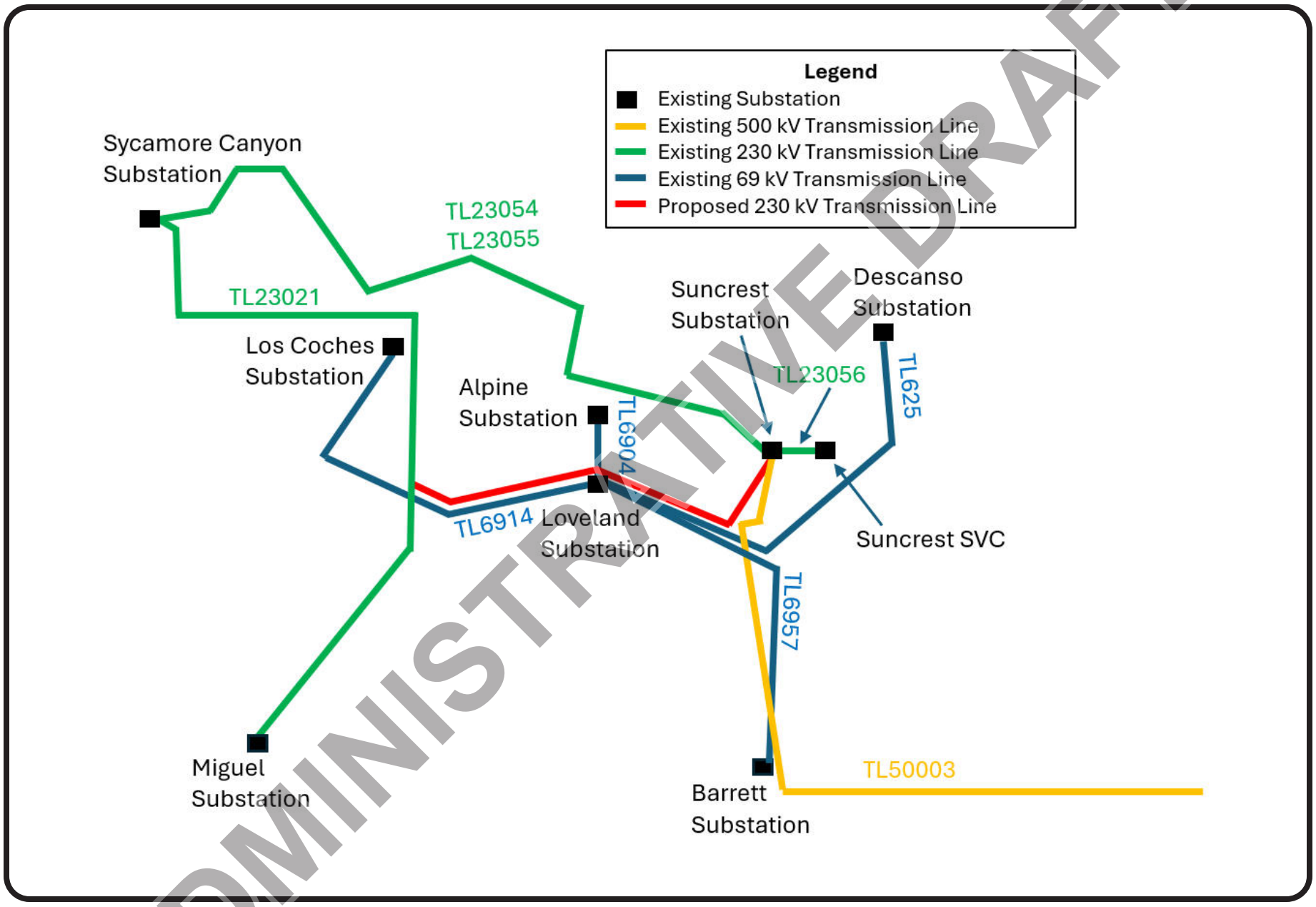

Figure 2-3: Proposed System Line Diagram

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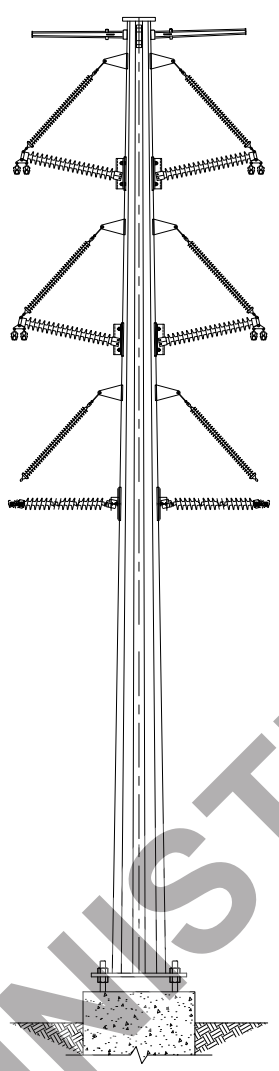
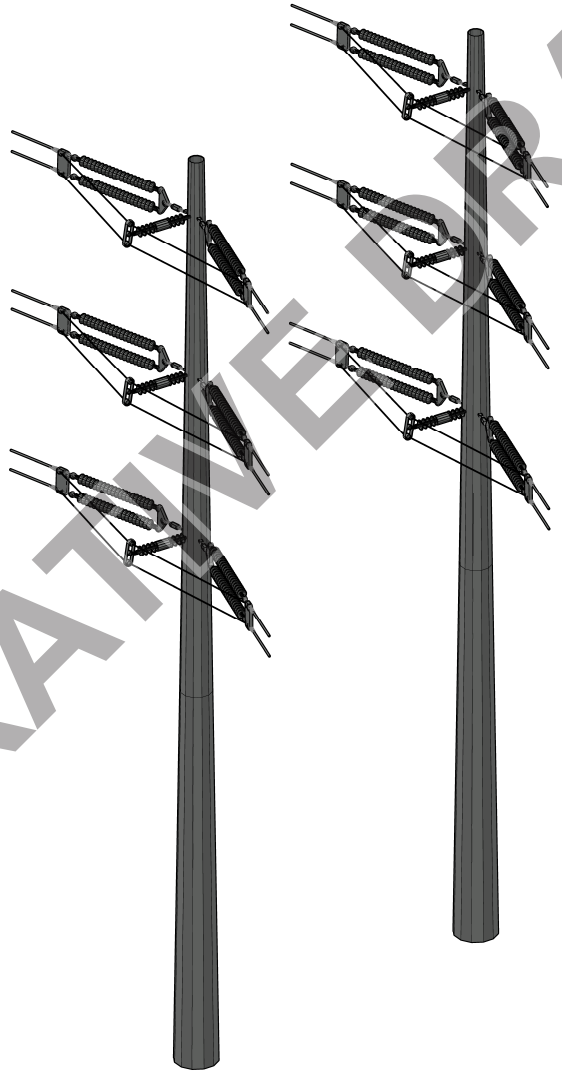


Height 100'-160'

TANGENT
CONFIGURATION



Height 100'-160'

DEAD END
CONFIGURATION

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Figure 2-4: 230 kV Transmission Line Structures Typical Drawing

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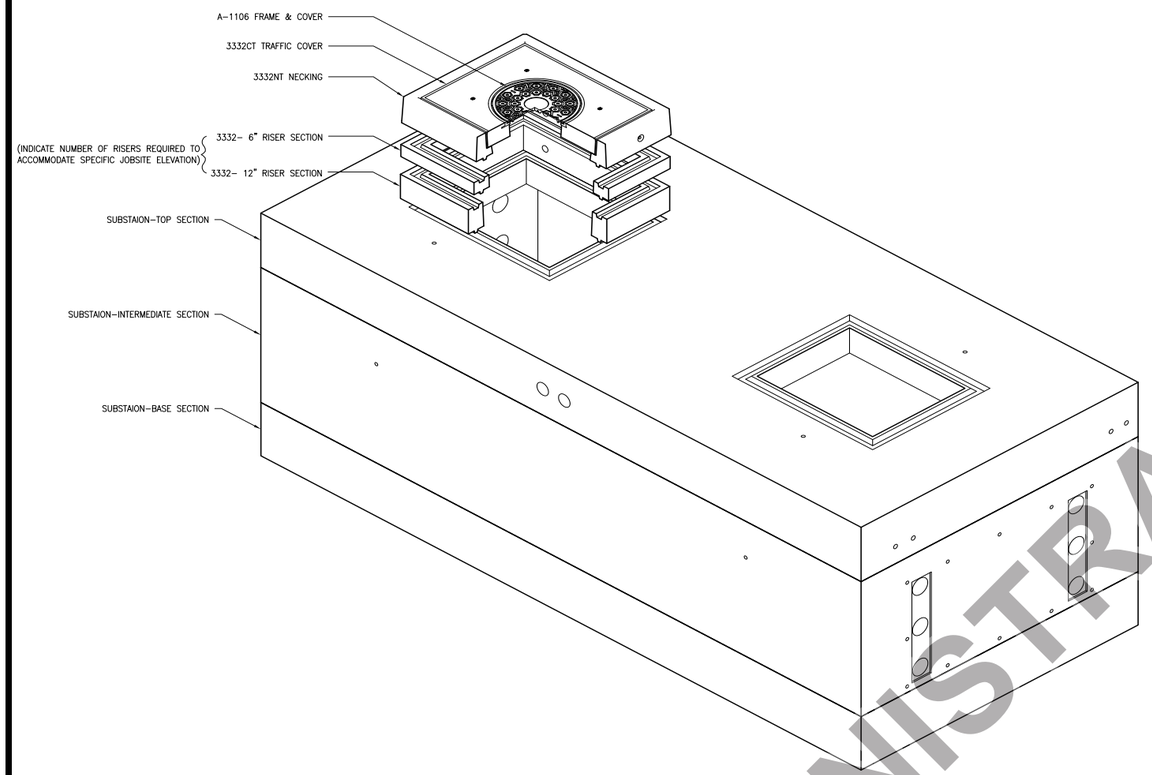
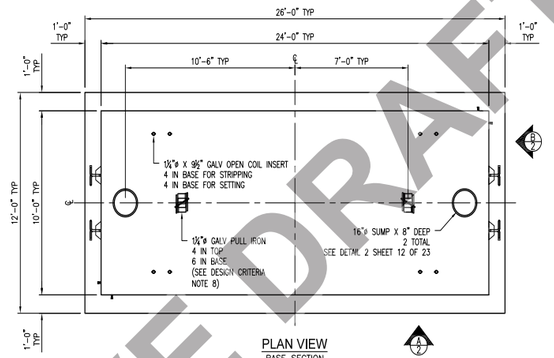
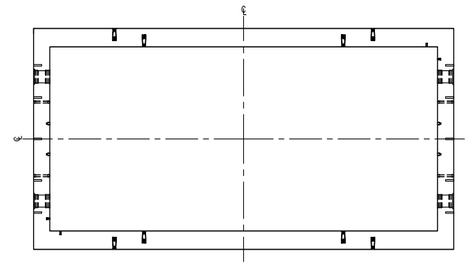
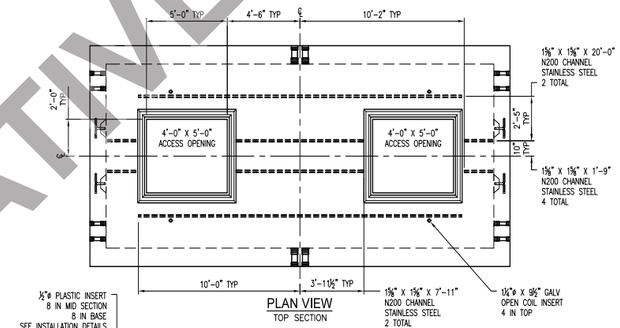




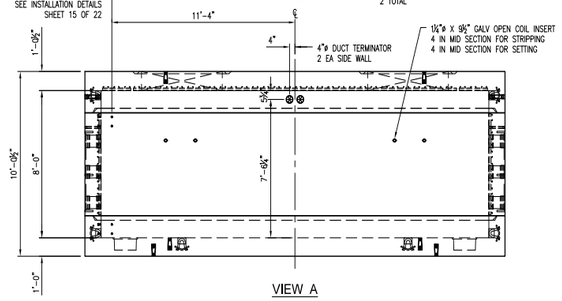
PLAN VIEW
BASE SECTION



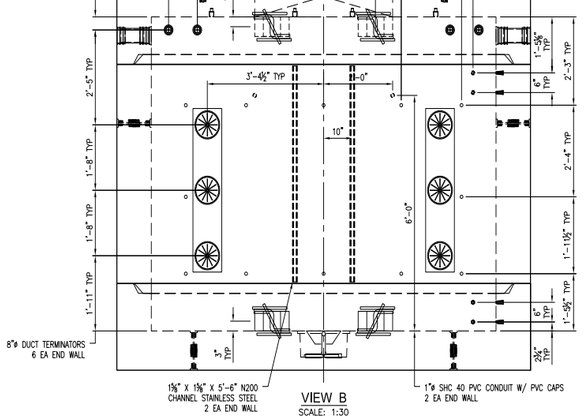
PLAN VIEW
MID SECTION



PLAN VIEW
TOP SECTION



VIEW A



VIEW B
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Figure 2-5: Utility Vault Typical Drawing

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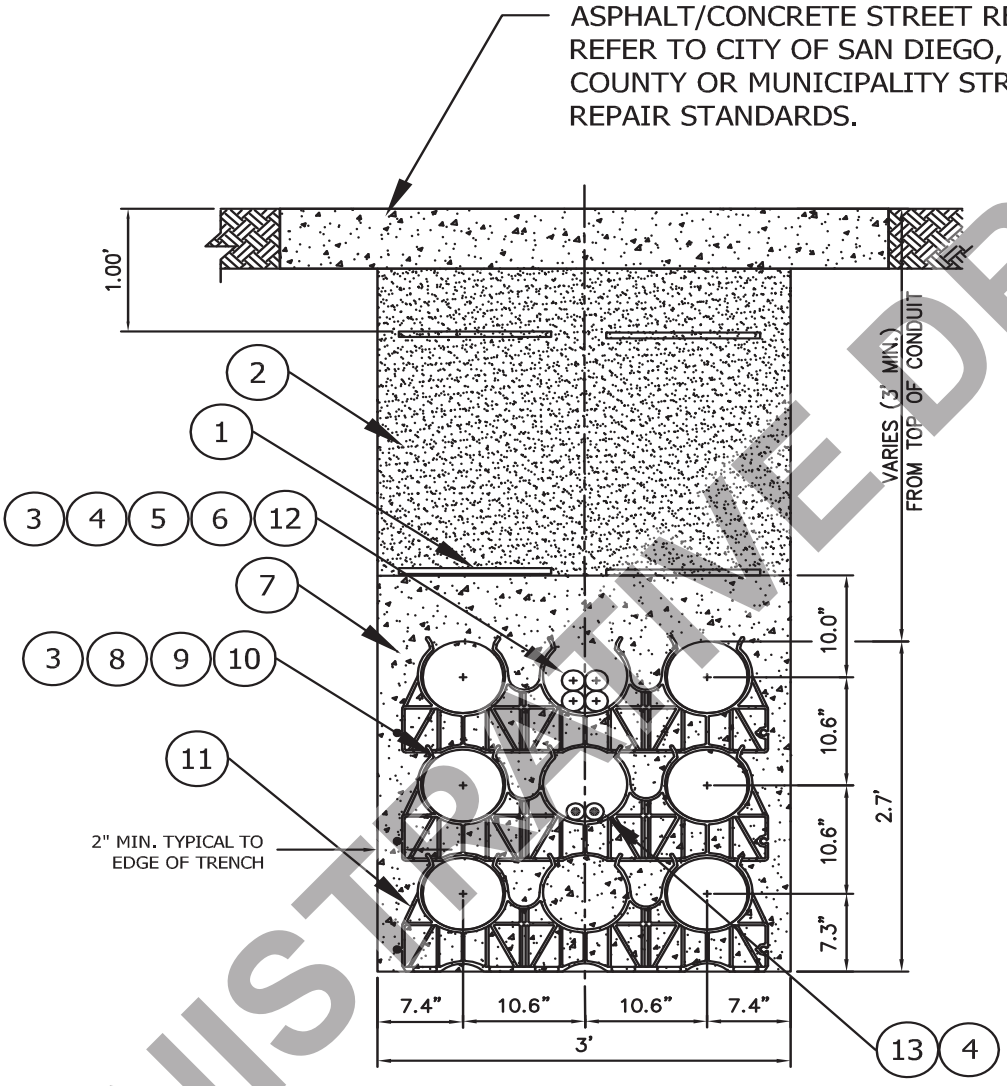

FIGURE 1
DOUBLE CIRCUIT VERTICAL WITH
COMMUNICATION DUCT
6-8" CONDUITS DUCT BANK,
2" QUAD DUCTS
2-2" DUCTS, GCC
ASPHALT/STREET SURFACE

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Figure 2-6: Underground Duct Bank Typical Drawing

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2.6.1.1.2 230 Kilovolt Overhead Segment

While several construction methods are being considered, the preliminary design for the proposed 230 kV OH segment of the Proposed Project includes the construction of drilled pier and micropile foundations for the tangent and dead-end configurations (i.e., strain dead-end and terminal dead-end). Additional details on these foundation specifications are summarized in Table 2-3: Overhead Transmission Summary.

To install the overhead structures, holes would need to be excavated. All identified work areas include the required disturbance limits; as a result, specific temporary work areas for excavations have not been identified, but they are anticipated to be located within the identified work areas. Table 2-4: Typical Excavation Dimensions provides the anticipated excavation dimensions required to construct subsurface features.

Transition Structures

Transition structures between the proposed 230 kV UG and OH segments would include six riser structures (i.e., one per circuit for each transition location). For illustrative purposes, riser structures are depicted in Figure 2-7: Riser Structure Typical Drawing.

2.6.1.2 Distribution Poles

Four new distribution poles—Pole 35.1, Pole 39.1, Pole 41.1, and Pole 43.1—would be installed in line with the existing distribution Circuit 1166 (C1166) to mitigate contact with the Proposed Project alignment as depicted on Map 41, Map 43, Map 44, and Map 45 of Attachment 2-A: Detailed Route Map, respectively. The four proposed distribution poles would be pre-engineered direct-bury steel poles.

2.6.1.3 Suncrest Substation Modifications

As depicted in Figure 2-8: Proposed Suncrest Substation Modification General Arrangement and Figure 2-9: Proposed Suncrest Substation Modification Profile Drawing, SDG&E's existing Suncrest Substation would be modified through the following activities:

- Installation of a 500/230 kV transformer bank (i.e., Bank 82) consisting of four separate single-phase units, including foundations, oil containment, fiberglass grating, and firewalls separating each single-phase unit.
- Installation of 12 kV tertiary reactors, 230 kV and 500 kV circuit breakers, disconnects, bus supports, and capacitor coupled voltage transformers.
- Installation of communication and protection devices, foundations, power and control conduits, support structures, and termination stands as needed to support equipment.
- Construction of a 230 kV bay to accommodate the loop-in of TL23021 to the Suncrest Substation.

All substation modifications would be conducted within the existing substation property.

Table 2-3: Overhead Transmission Summary

ROW Width (feet)	Approximate Length (miles)	Typical Structure Spacing (feet)	Structure Type	Approximate Number of Structures	Installation Type	Foundation Type	Range of Aboveground Height (feet)	Maximum Aboveground Height (feet)	Typical Embedment/ Foundation Diameter	Typical Embedment/ Foundation Depth (feet)
200	11	1,100	TSP	34	Various	Drilled Pier	100 to 160	160	8 feet to 11 feet	20 to 30
200	11	1,100	TSP	33	Various	Micropile	100 to 160	160	6 to 9 inches per micropile	20 to 40

Note: This table is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

Table 2-4: Typical Excavation Dimensions

Proposed Project Feature	Typical Excavation Dimensions
Proposed 230 kV UG Segment	
Transition Vault	29 feet long, 14 feet wide, 9 feet deep
Duct Bank	29 feet long, 12 feet wide, 7 feet deep
Riser Structure (Pier Foundation)	12 to 14-foot-diameter, 20 to 40 feet deep
Proposed 230 kV OH Segment	
TSP (Drilled Pier Foundation)	6 to 9-foot-diameter, 20 to 40 feet deep
TSP (Micropile Foundation)	1-foot-diameter, 20 to 35 feet deep

Note: This table is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

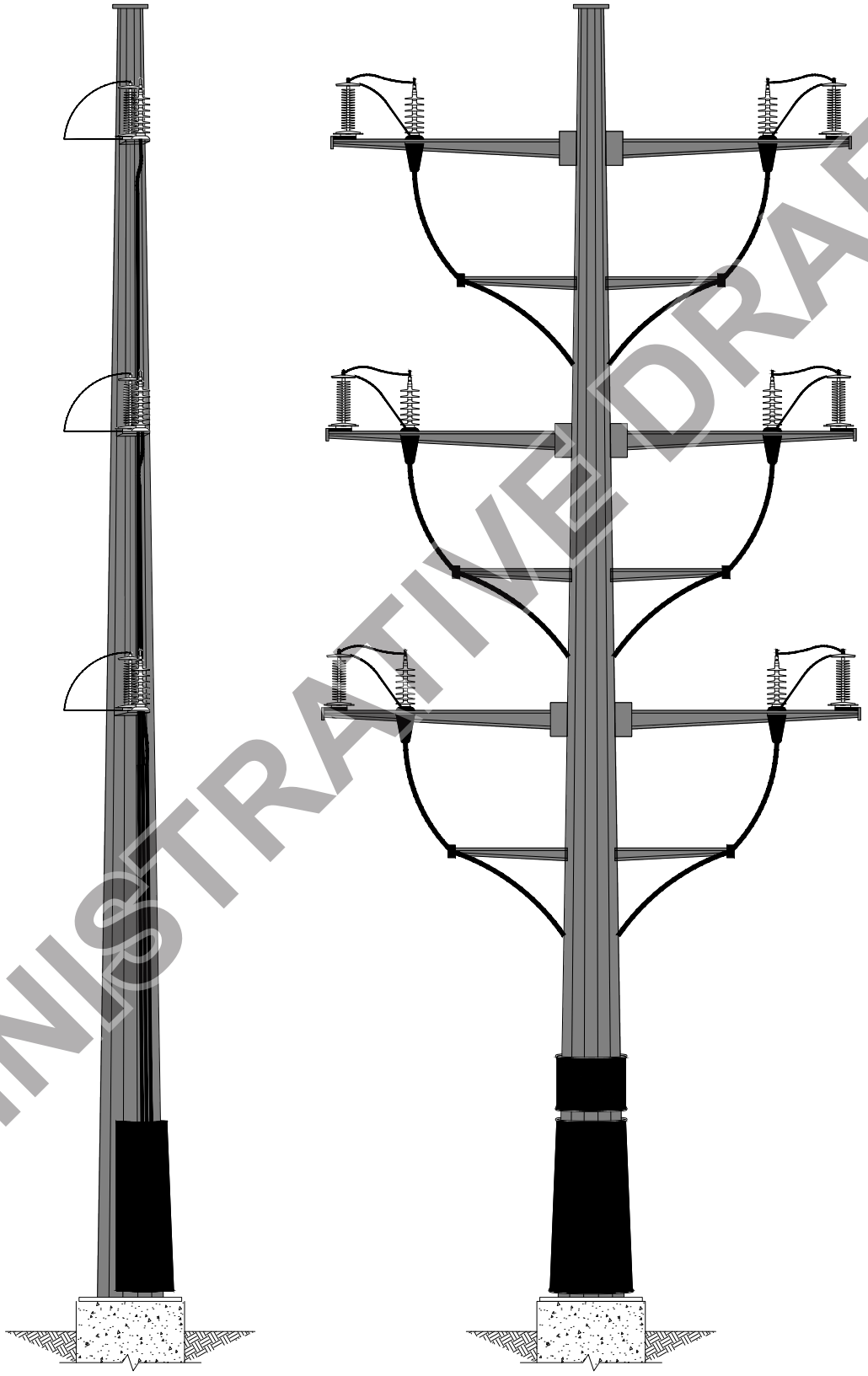

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Figure 2-7: Riser Structure Typical Drawing

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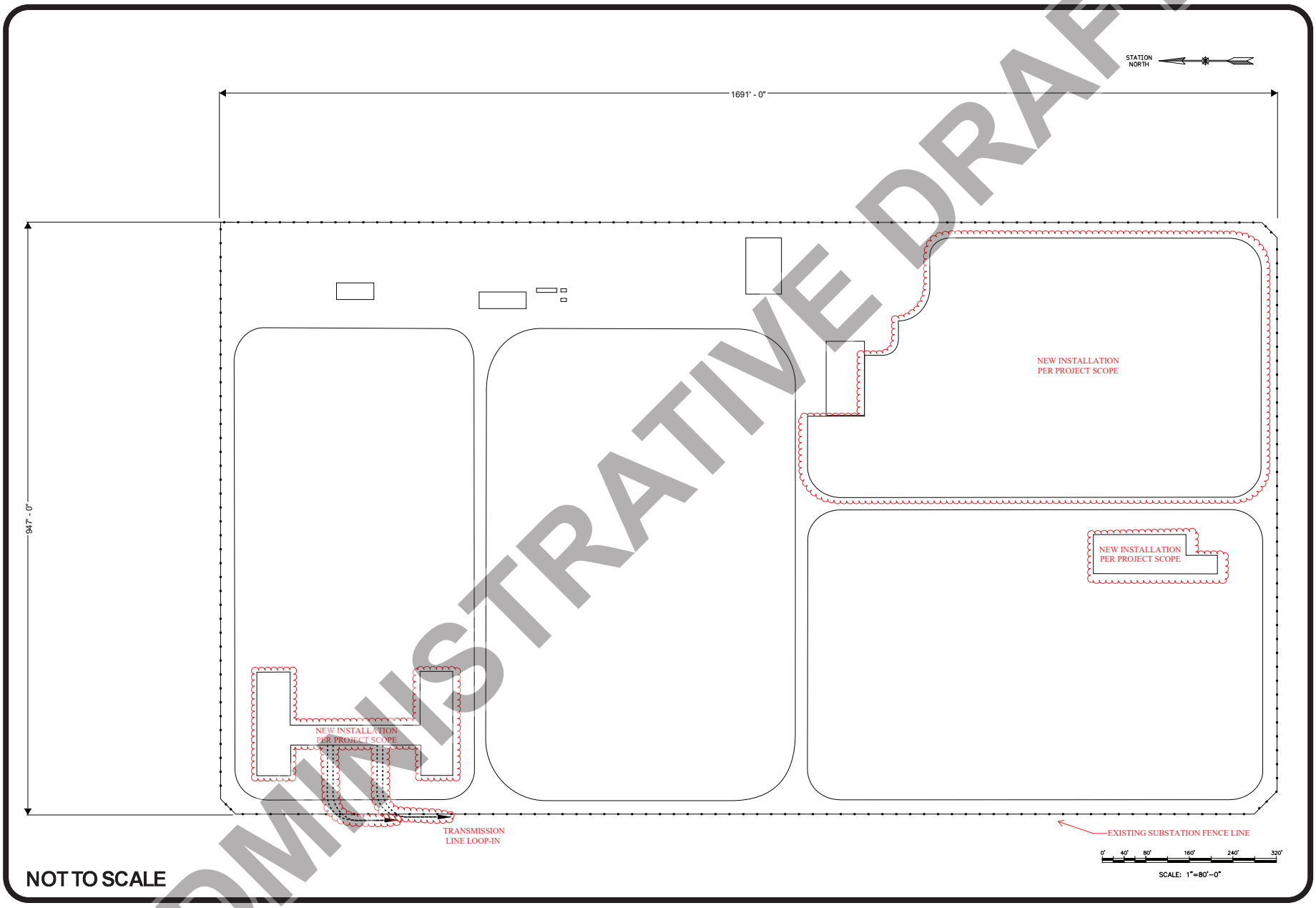

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Figure 2-8: Proposed Suncrest Substation Modification General Arrangement

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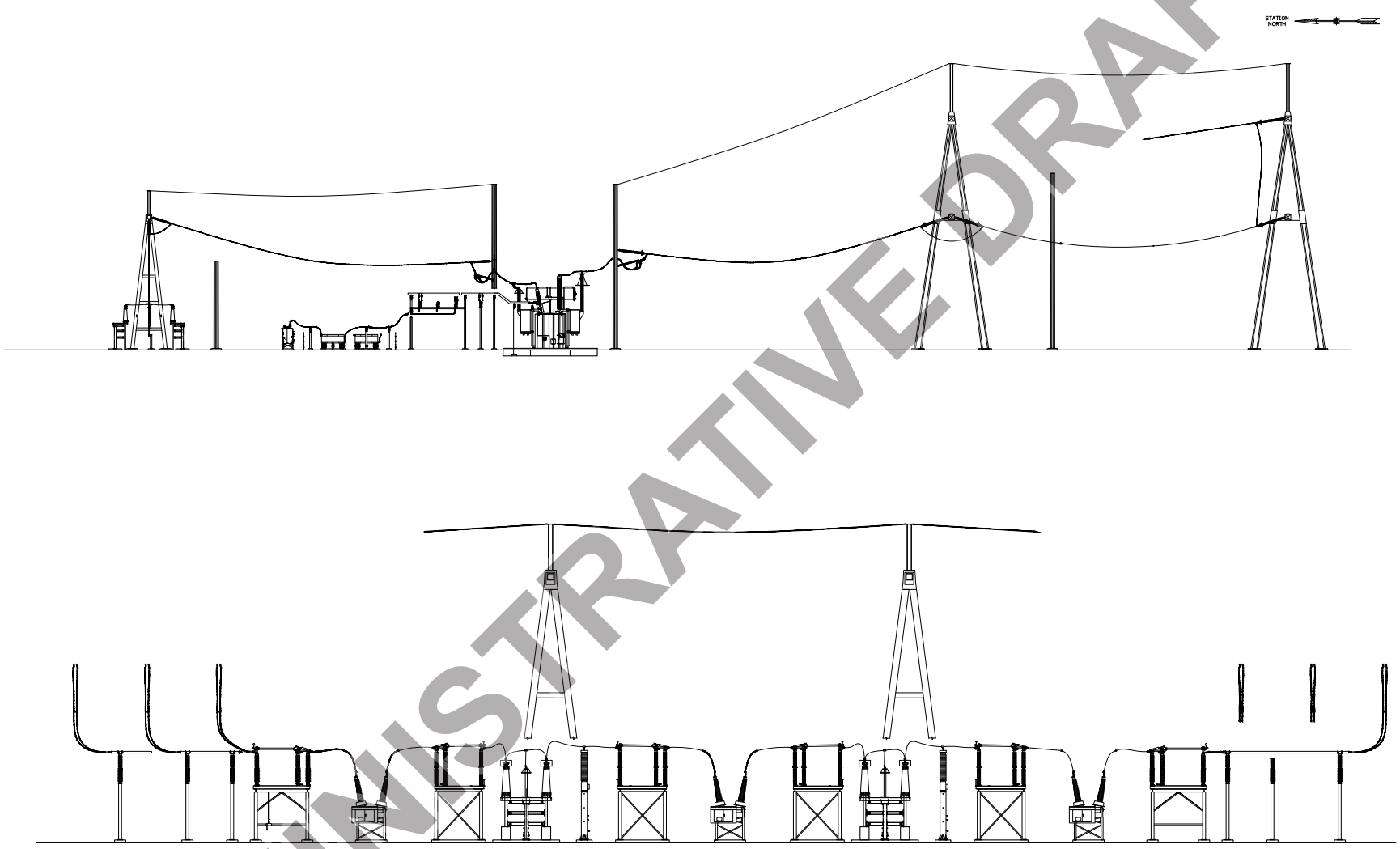

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Figure 2-9: Proposed Suncrest Substation Modification Profile Drawing

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Other existing substation infrastructure would remain in place. Existing telecommunications, control and protection, and Supervisory Control and Data Acquisition (SCADA) systems within the substation boundary would be modified as needed to accommodate the equipment. The substation has existing lighting, which includes typical security lighting, that conforms to the National Electric Safety Code (NESC) requirements and other applicable outdoor lighting codes and would not require any upgrades.

Substation control enclosures would be painted a non-reflective, American National Standards Institute (ANSI) 70 light gray or similar neutral tone. All other substation components would have a non-reflective finish to the extent that such components are commercially available and would match the existing substation equipment as much as practicable.

2.6.2 System Design

The modified Suncrest Substation would be rated at 1120 megavolt-amperes (MVA). The proposed 230 kV transmission line would be designed for a continuous rating of 912 MVA during normal conditions and 1182 MVA under long-term emergency conditions.

2.6.2.1 230 kV Transmission Structure Components

The proposed 230 kV transmission poles or towers would be weathered steel[5] for corrosion resistance, with heights ranging from 100 to 160 feet and spans of 400 to 1,200 feet. Where possible, poles would be soldiered or located generally parallel with poles on adjacent existing transmission lines to reduce visual impacts.

Conductors would be composed of 1033 aluminum conductor steel-reinforced cable, sized appropriately to handle anticipated thermal loads. Toughened glass insulators would be installed on all terminal dead-end structures, and braced line post insulators would be installed on all tangent pole structures. For illustrative purposes, the insulators are depicted in Figure 2-10: Insulator Typical Drawing. Additionally, to enhance reliability and protect against lightning strikes, two Optical Ground Wire (OPGW) cables and All-Dielectric Self-Supporting (ADSS) cables would be installed along the proposed 230 kV OH segment.

2.6.2.2 Underground Conductor/Cable Installations

The proposed 230 kV UG segments would require cross-linked polyethylene-insulated cables, which would be laid using traditional trenching methodology, with manholes or vaults spaced every 2,000 to 2,500 feet for access. The proposed 230 kV western UG segment would begin by tying into the existing 230 kV OH segment of TL23021 and would transition from underground cables to overhead conductors at cable poles located at the end of Canyon Rim Drive. These poles would include riser structures, cable terminations, and surge arresters. The proposed 230 kV eastern UG segment would begin by tying into the proposed 230 kV OH segment and would terminate and integrate into the Suncrest Substation.

[5] Weathered steel poles exhibit a patina color which develops over time to blend into existing environmental surroundings.

2.6.2.3 Telecommunications Lines

Telecommunication cables and associated infrastructure would be installed as part of the OPGW and ADSS installation. Below-ground telecommunication lines would be jointly trenched with the proposed UG segment. Typical excavation depths for the Proposed Project components associated with the 230 kV western and eastern UG segments are detailed in Table 2-4: Typical Excavation Dimensions. No antenna or node facilities are proposed for installation.

2.6.2.4 Existing Utilities

The Proposed Project has been designed in consideration of existing infrastructure (e.g., roads and utilities) and easements. As discussed in the following subsection, modifications to the existing TL23021 would be required to integrate the proposed 230 kV transmission line to the Suncrest Substation.

2.6.2.4.1 TL23021 Modifications

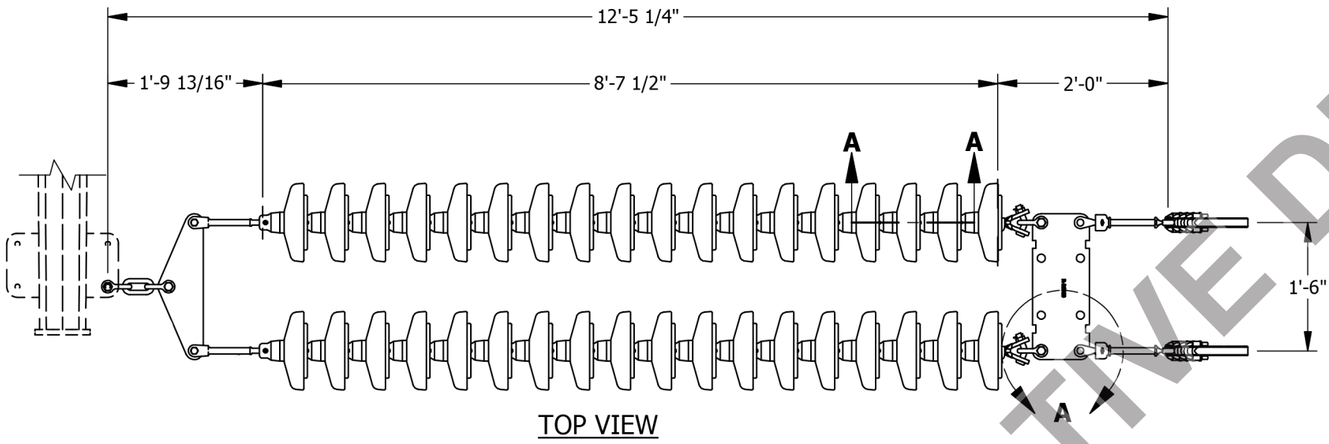
Modifications to TL23021 would occur on the proposed 230 kV western UG segment between two existing poles, which are located east of Vista de Montemar and Shadow Mountain Road and are depicted on Map 1 and Map 2 of Attachment 2-A: Detailed Route Map, respectively. These modifications would include cutting the existing conductors and re-routing them to the proposed cable poles. The work would be carried out in the vicinity of Vista de Montemar. To the extent practicable, the proposed 230 proposed 230 kV western UG segment was designed to be located within or parallel to SDG&E's existing 200-foot-wide easement that includes TL23021 on Crestridge Ecological Reserve.

2.6.2.5 Watercourse Crossings

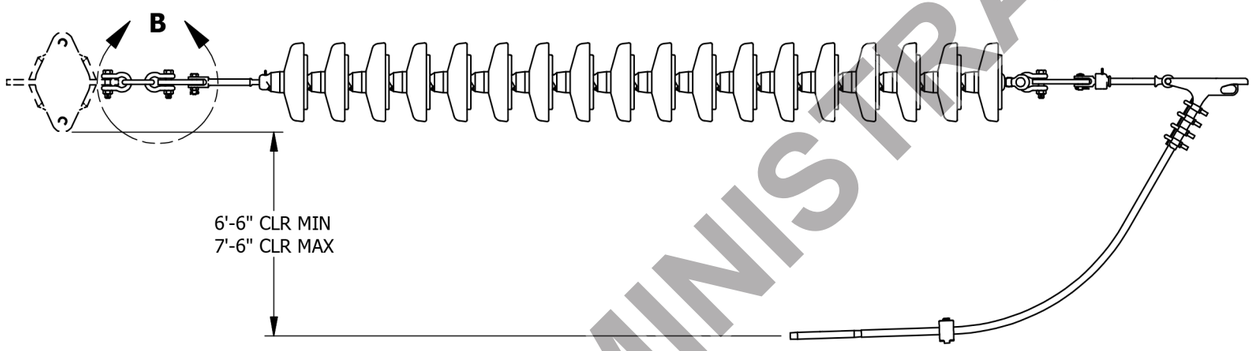
Several watercourse crossings (e.g., waterbodies and concrete-lined stormwater conveyance features) have been identified within the vicinity of the Proposed Project. These watercourse crossings would be avoided during construction and operations and maintenance (O&M) by implementing conventional construction techniques to span or cross underneath the proposed 230 kV transmission line. The locations of these watercourse crossings are described in Section 3.11 Hydrology and Water Quality and depicted in Attachment 3.11-B: Hydrologic Features in the Proposed Project Area. SDG&E would adhere to applicable federal and state water quality standards and waste discharge requirements during construction and O&M of the Proposed Project. As further discussed in Section 3.10 Hazards and Hazardous Materials, SDG&E would implement the best management practices (BMPs) provided in the SDG&E Water Quality Construction Best Management Practices Manual (BMP Manual).

2.6.3 Construction

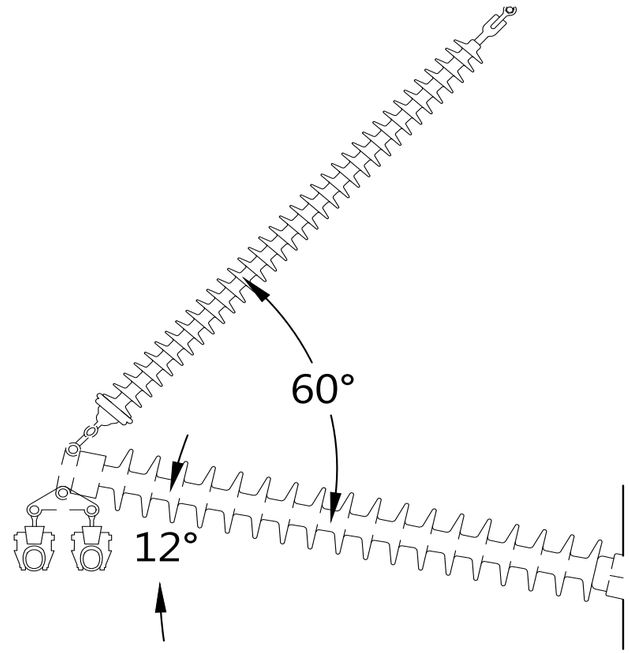
This section includes an overview of the typical methods that would be used for construction of the Proposed Project. The Proposed Project would be constructed to meet all California Public Utilities Commission (CPUC) General Order (GO) 95 requirements, including minimum vegetation and equipment clearances, in addition to the vegetation clearance requirements in California Public Resources Code (PRC) Section 4292 and Title 14 California Code of Regulations (Cal. Code Regs.) Section 1254.



TOP VIEW



TOUGHENED GLASS INSULATOR



BRACED LINE POST INSULATOR

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Figure 2-10: Insulator Typical Drawing

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2.6.3.1 Construction Access

The Proposed Project would be accessed using existing paved and unpaved roads, proposed permanent access roads, proposed temporary access roads, and walking foot paths. A summary of the anticipated access types is provided in Table 2-5: Access Summary and depicted in Attachment 2-A: Detailed Route Map. All access road construction would follow the specifications outlined in the SDG&E's Design and Procedure Manual for Transmission Line Access Roads (SDG&E 2007a). A more detailed discussion of the access requirements is included in the subsections that follow.

Table 2-5: Access Summary

Type of Road	Description	Approximate Length (miles)	Typical Width (feet)	Approximate Area (acres)
Existing Unpaved Roads	Typically on private land and may require minor improvements.	Varies	12 to 20	--
Existing Paved Roads	Typically maintained by the County of San Diego (County) and would not require improvements prior to use.	Varies	40	--
Proposed Permanent Access Roads	Requires vegetation removal, grading, compaction, and/or road base. May require installation of waterbars[6] and other drainage features.	0.31	14 to 20	0.87
Proposed Permanent Walking Paths	Does not require vegetation removal, grading, compaction, and/or road base.	0.30	2	0.06

2.6.3.1.1 Existing Access Roads

The Proposed Project contains an existing network of paved and unpaved access roads that would be used during construction and O&M. The County typically maintains existing paved roads, while unpaved roads are typically on private lands within existing undeveloped areas or areas established to provide access to SDG&E's existing transmission infrastructure. Existing paved roads would not require improvement before use.

Existing unpaved roads may require minor improvements, typically within the existing road prism, to enable the safe passage of construction vehicles and equipment. These improvements could include minor grading, vegetation trimming/removal, and/or the application of road base (e.g., decomposed granite). The equipment that would be used to improve existing access roads is provided in Attachment 2-B: Proposed Construction Equipment and Workforce.

Existing unpaved access roads are generally 12 to 14 feet wide for straight sections and up to 20 feet wide at curves to allow construction equipment and vehicles to travel safely. Existing access

[6] A waterbar is a diagonal channel across a road that diverts surface off the road into the slope below.

roads less than 14 feet wide would be analyzed for potential widening, depending on current conditions and feasibility. Vegetation would be cleared and grubbed on a portion of the existing unpaved access road to Pole 42 to widen the road for the safe travel of construction vehicles and equipment.

Incidental damage to existing roads is not expected from the Proposed Project activities. Should incidental road damage occur, the roads would be restored to pre-construction conditions or better as required by applicable permits and/or landowner agreements.

2.6.3.1.2 Proposed Access Roads

Approximately 0.31 mile of permanent access roads would be constructed to access the proposed 230 kV transmission line to facilitate future O&M activities. Permanent access roads would be graded along the contours to the extent feasible and engineered to industry and SDG&E standards. Drainage swales, riprap, and other drainage features would be installed to reduce long-term erosion. These access roads would be approximately 14 to 20 feet wide and are depicted in Attachment 2-A: Detailed Route Map.

2.6.3.1.3 Overland Access Routes

No overland access routes are anticipated to be used during construction of the Proposed Project.

2.6.3.1.4 Proposed Walking Paths

Approximately 0.30 mile of permanent walking paths would be established during construction to access temporary construction areas and permanent pole sites. These permanent walking paths would be approximately 2 feet wide and are depicted in Attachment 2-A: Detailed Route Map.

2.6.3.1.5 Helicopter Access

To access some of the Proposed Project work areas where conventional access could pose a safety risk, impact biological resources, or otherwise be infeasible, temporary and permanent helicopter access is anticipated. Helicopter crews would coordinate flight paths with local air traffic control from the landing zones, staging/fly yards[7], and local airports or airstrips, as appropriate. Once in the vicinity of the Proposed Project, helicopter flight paths would generally follow the Proposed Project alignment, though flight paths may be located over residential areas, if necessary.

Helicopter Safety Plans would be prepared and, if required, a Congested Area Plan pursuant to Title 77 and Title 14, Section 133.33(d) of the Code of Federal Regulations would be developed with the Federal Aviation Administration (FAA) Flight Standards District Office in San Diego, which has jurisdiction over the Proposed Project region (FAA 2025b). In addition, SDG&E would coordinate with the USFS on helicopter access through USFS-designated Protected Activity Areas.

Depending on final design and configuration, helicopter landing areas or pads may need to be cleared or constructed, depending on topography and the location of the pole and work areas

[7] A fly yard is an area that is used temporary helicopter takeoff, landing, and refueling, if necessary.

relative to existing access roads and pads, and the ability to reach these areas safely by work crews on foot (generally within 300 feet).

Temporary Helicopter Access

The Proposed Project has the potential to use light-, medium-, and heavy-duty helicopters. Helicopter models that would be used may include, but are not limited to, Kaman K-Max, Sikorsky UH-60 Blackhawk, Boeing CH-47 Chinook, Air Crane, Hughes 500D, and Bell Long Ranger. Light-duty helicopters may be used to ferry personnel to remote locations that lack conventional access, conduct survey and/or patrol flights, and support wire stringing (e.g., flying sock line and following head sock). Medium-duty helicopters may be used to move equipment and material to and from remote sites and to set insulator assemblies and structure components. Heavy-duty helicopters may be used for heavy structure sections. As depicted in Attachment 2-A: Detailed Route Map, 29 poles would be set by helicopter.

As depicted in Figure 2-1: Proposed Project Overview Map and Attachment 2-A: Detailed Route Map, temporary helicopter takeoff and landing areas would be located within the High Glen Fly Yard, Sweetwater Staging/Fly Yard, and Lyons Valley Staging/Fly Yard. Although further discussed in the Permanent Helicopter Access subsection, construction of the Proposed Project would also require the use of the permanent helicopter takeoff and landing zones that would also be used to perform O&M activities.

No helicopters would be stored at the staging/fly yards or helicopter takeoff and landing zones overnight. Helicopters may be refueled at these sites if necessary. The anticipated hours and duration of helicopter operations are provided in Section 2.6.10 Construction Workforce, Equipment, Traffic, and Schedule.

Permanent Helicopter Access

Permanent helicopter access would be needed to perform construction of the Project as well as perform O&M activities. To complete these activities, the Proposed Project has the potential for use of light-, medium-, and heavy-duty helicopters. Helicopter models that would be used may include, but are not limited to, Kaman K-Max, Sikorsky UH-60 Blackhawk, Boeing CH-47 Chinook, Air Crane, Hughes 500D, and Bell Long Ranger.

As depicted in Attachment 2-A: Detailed Route Map, the Proposed Project would include 24 permanent helicopter takeoff and landing zones located adjacent to or in close proximity to the work areas for the TSPs. Each permanent helicopter takeoff and landing zone would vary in dimension but would be a maximum of 100 feet by 100 feet.

2.6.3.2 Staging/Fly Yards

2.6.3.2.1 Staging/Fly Yard Locations

Staging for the Proposed Project would occur at the proposed High Glen Staging Yard, High Glen Fly Yard, Greenfield Staging Yard, Hospital Staging Yard, Swat Staging Yard, Sweetwater Staging/Fly Yard, and Lyons Valley Staging/Fly Yard. A summary of each staging area is detailed in Table 2-6: Proposed Staging/Fly Yard Summary.

Table 2-6: Proposed Staging/Fly Yard Summary

Name	Location	Assessor's Parcel Number(s) (APNs)	Use	Existing Land Cover Type(s)	Approximate Size (acres)
High Glen Staging Yard	Unincorporated San Diego County, south of Japatul Road and off of High Glen Road	523-130-08	Receiving, staging, laydown area, and worker parking	Disturbed, bare ground	7.02
High Glen Fly Yard	Unincorporated San Diego County, south of Japatul Road and off of High Glen Road	523-130-08	Helicopter landing/pick up materials	Bare ground, chapparal	0.79
Greenfield Staging Yard	Unincorporated San Diego County, off of Siesta Calle and Greenfield Drive	508-220-01	Receiving, staging, laydown area, and worker parking	Disturbed	6.02
Hospital Staging Yard	City of El Cajon, off of Greenfield Drive and East Main Street	507-200-58	Receiving, staging, laydown area, and worker parking	Developed, disturbed, bare ground, landscaped/ornamental	4.78
Swat Staging Yard	Unincorporated San Diego County, northwest of Barrett Lake off of Lyons Valley Road	601-010-01	Receiving, staging, laydown area, and worker parking	Disturbed, bare ground	4.80
Sweetwater Staging/Fly Yard	Unincorporated San Diego County, off Japatul Road	520-120-02	Receiving, staging, laydown area, worker parking, and helicopter landing/pick up materials	Bare ground	0.49
Lyons Valley Staging/Fly Yard	Unincorporated San Diego County, southeast of Lyons Valley Road and north of Barrett Lake Rd	601-070-04 601-060-01	Receiving, staging, laydown area, worker parking, and helicopter landing/pick up materials	Non-native grassland	2.04
Total					**25.95**

Note: Due to rounding, total may not sum.

Staging/fly yard sizes would vary depending on negotiations with landowners to establish the temporary construction easements; therefore, maximum staging area acreages are identified in Table 2-6: Proposed Staging/Fly Yard Summary.

Staging yards/fly yards may be used as a refueling area for vehicles and construction equipment; as an equipment wash station; for assemblage of poles and other Proposed Project components; for storage of material and equipment, storage containers, construction trailers, and portable restrooms; and for worker parking. Some substation equipment (e.g., disconnect switches, instrument transformers, take-off towers, insulators, conductors, bus, connectors, conduit, cable trench, and rebar) would be received and temporarily stored at the staging yard/fly yards prior to installation.

In addition, the High Glen Fly Yard, Sweetwater Staging/Fly Yard, and Lyons Valley Staging/Fly Yard would be used by helicopters to land and pick up materials. Fueling would typically be conducted at airports or at off-site fueling locations, but may occur at the staging/fly yards. No helicopters would be stored at the staging area overnight.

Access to the staging/fly yards would be gated and locked for security purposes. The staging yards/fly yards would be connected to access roads via a temporary driveway or existing access roads. The staging areas are depicted in Attachment 2-A: Detailed Route Map.

2.6.3.2.2 Staging/Fly Yard Preparation

Where possible, the staging/fly yards would be located in previously disturbed areas. If staging areas have not been previously paved or have stabilized surfaces, staging area preparation would involve vegetation clearing or grubbing, topsoil salvage (if grading is necessary), and limited grading. Gravel may be used to line the ground at the staging area to prevent unsafe surface conditions and unnecessary sediment transport off-site. Before the application of gravel, geotechnical fabric would be laid on the ground at the staging area to facilitate gravel removal during decommissioning of the staging area.

No tree removal is planned as part of the Proposed Project; however, because construction would occur over approximately 5 years, some tree removal may be required during construction. In addition, some trees may be trimmed, and some mature bushes and other scrub vegetation may be cleared.

Perimeter security fencing–typically consisting of a 6- to 8-foot-tall chain-link-style fence–may be used to establish secure areas within the equipment staging/fly yards. This fencing would be utilized to secure equipment and would be locked nightly. Visual screening may be installed on the fencing to shield the staging area from the general public.

Temporary lighting may also be installed as a security measure. Depending on the risk analysis of the staging area, additional security measures may include on-site security personnel, cameras, and motion lighting. Temporary lighting, if required, would typically be provided by portable light plants. Temporary power, if required, would be provided by portable gas/diesel generators. If a nearby existing overhead distribution system is available, it may be tapped to provide power.

Following construction, staging areas would be returned to pre-construction conditions consistent with the surrounding area, to the extent feasible.

2.6.3.3 Construction Work Areas

Construction work areas that would be required for the Proposed Project may include, but are not limited to, the following types:

- temporary work areas,
- helicopter takeoff and landing zones,
- temporary guard structures,
- stringing sites, and
- temporary power locations.

A description of the specific work areas and the associated activities that would occur at each work area are described in the subsections that follow and are depicted in Attachment 2-A: Detailed Route Map.

2.6.3.3.1 Temporary Work Areas

Temporary work areas would be established to support the transmission structure installation and substation modifications. These temporary work areas would facilitate equipment and material storage and use. Activities that would be conducted within the temporary work areas include transitioning between the 230 kV UG and OH segments; underground vault and trenching excavations, installation, and backfill; excavations for pole foundations and placement; and conductor installation.

2.6.3.3.2 Helicopter Takeoff and Landing Zones

As described in Section 2.6.3.1.5 Helicopter Access, temporary helicopter takeoff and landing would occur at the High Glen Fly Yard, Sweetwater Staging/Fly Yard, and Lyons Valley Staging/Fly Yard. In addition, helicopters may touch down along access roads, within the permanent helicopter takeoff and landing zones, or within other construction work areas, as appropriate. Helicopter takeoff and landing zones may support the following construction activities:

- conducting survey and/or patrol flights;
- dropping off or picking up construction crew members, equipment, and/or materials;
- dropping off or picking up structures/portions of structures, conductor sock line, conductor pull rope, and/or conductor;
- setting insulator assemblies and structure components; and
- fueling helicopters.

2.6.3.3.3 Retaining Wall Installation

The Proposed Project would not require the construction of retaining walls.

2.6.3.3.4 Temporary Guard Structures

Guard structures are temporary structures that would be installed at transportation and utility crossings prior to conductor installation/removal to prevent line drops on existing power lines, roadways, and other features that need protection during construction. These structures would be designed to stop the movement of the conductor should it drop below the anticipated stringing height during installation/removal.

2.6.3.3.5 Stringing Sites

Typically, stringing sites are temporary construction areas that would be used to stage and operate equipment necessary for the installation or removal of conductor/cable. Stringing site preparation would involve grubbing and limited grading to create a level work area. Typically, one stringing site would be located at each end of a "wire pull" to facilitate this process at intervals of 1 to 2 miles. Dimensions for temporary stringing and tensioning sites would vary but would be a maximum of approximately 50 feet by 200 feet.

2.6.3.3.6 Temporary Power

To provide temporary power and a backup power source, portable gas/diesel generators would be used. If a nearby existing overhead distribution system is available, it may be tapped to provide power.

2.6.3.3.7 Work Area Disturbance

Implementation of the Proposed Project would result in both temporary and permanent impacts. Table 2-7: Work Area Disturbance provides work area dimensions (including both temporary and permanent footprints) for each Proposed Project component. Attachment 2-A: Detailed Route Map depicts the locations of the anticipated temporary and permanent disturbance areas associated with the Proposed Project.

2.6.3.4 Site Preparation

2.6.3.4.1 Surveying and Staking

The centerline would be surveyed and marked at line-of-sight intervals, at points of intersection (including offset stakes marking the edges of the access road ROW), and at all known underground facilities. Any sensitive biological, or hydrological resources, where appropriate, would also be clearly marked to restrict construction activities and equipment from entering these areas. Exclusionary zones for other resources (e.g., cultural sites) would also be demarcated.

2.6.3.4.2 Utilities

Prior to beginning any ground-disturbing work, SDG&E would contact Underground Service Alert, at 8-1-1, to notify utility companies to mark and locate existing underground structures along the entire length of the current construction area for the Proposed Project. In addition, SDG&E would probe and expose existing utilities, in accordance with applicable laws, before using power equipment. Prior to construction, SDG&E would obtain emergency contact information for utilities that may be in close proximity or require monitoring during construction of the project.

Table 2-7: Work Area Disturbance

Construction Work Area Type	Temporary Disturbance Area[8] (acres)	Permanent Disturbance Area[9] (acres)	Total Disturbance Area (acres)	Typical Temporary Dimensions[10] (feet)	Typical Permanent Dimensions[11] (feet)
Drainage Swale	0.00	0.04	0.04	Not Applicable (N/A)	Varies
RipRap	0.00	<0.01	<0.01	N/A	Varies
Guard Structures	0.04	0.00	0.04	50 by 20	N/A
Helicopter Landing Pads	0.00	3.81	3.81	N/A	100 by 100
Proposed Permanent Access Roads	0.79	0.87	1.67	Varies	14 to 20 by length
Proposed Permanent Walking Paths	0.00	0.06	0.06	N/A	2 by length
Helicopter Structure (Strain Dead-End Pole) Work Area	0.70	0.03	0.73	100 by 100	20 by 20
Helicopter Structure (Tangent Pole) Work Area	0.93	0.17	1.10	50 by 50	20 by 20
Helicopter Structure (Terminal Dead-End Pole) Work Area	1.35	0.06	1.41	100 by 100	20 by 20
Conventional Structure (Cable Pole) Work Area	0.46	0.53	1.00	Varies	Varies
Conventional Structure (Distribution Pole) Work Area	0.16	0.03	0.18	Varies[12]	Varies[13]
Conventional Structure (Tangent Pole) Work Area	1.12	1.36	2.48	50 by 50	20 by 20
Conventional Structure (Terminal Dead-End Pole) Work Area	0.81	1.30	2.10	120 by 120	20 by 20
Fly Yard	0.79	0.00	0.79	Varies	N/A
Staging Yard	22.62	0.00	22.62	Varies	N/A
Staging/Fly Yard	2.53	0.00	2.53	Varies	N/A

[8] The temporary disturbance area is inclusive of all work areas within each construction work area type.
[9] The permanent disturbance area is inclusive of all work areas within each construction work area type.
[10] The dimensions are typical temporary dimensions for each work area type.
[11] The dimensions are typical permanent dimensions for each work area type.
[12] Typically collocated within work area for the adjacent transmission pole.
[13] Typically collocated within work area for the adjacent transmission pole.

Construction Work Area Type	Temporary Disturbance Area[8] (acres)	Permanent Disturbance Area[9] (acres)	Total Disturbance Area (acres)	Typical Temporary Dimensions[10] (feet)	Typical Permanent Dimensions[11] (feet)
Stringing Site	0.48	0.12	0.59	50 by 200	Varies
Temporary Workspace	0.26	0.00	0.26	Varies	N/A
Underground Easement	16.74	0.00	16.74	40 by length	N/A
Utility Vault	0.00	0.24	0.24	N/A	10 by 24
Total	**49.78**	**8.62**	**58.40**	**--**	**--**

Notes:

- All salvaged topsoil would be stored on site in the immediate vicinity of temporary disturbance areas, at a nearby approved work area, or at a staging area when topsoil salvage is deemed to be advantageous. Exact stockpile locations have not been identified as geotechnical investigations have not been completed, and quantities of stockpile salvage are unknown.
- The identified disturbance areas are inclusive of any required excavation limits.
- All work at the existing SDG&E Suncrest Substation would be conducted within the existing substation property.

In case of accidental service interruption to another utility, SDG&E would immediately contact the affected utility to coordinate actions to restore service in a safe and timely manner.

No subsurface work would be conducted that would conflict with (i.e., directly impact or compromise the integrity of) a buried utility. In the event of a conflict, areas of subsurface excavation or pole installation would be realigned vertically and/or horizontally, as appropriate, to avoid other utilities and provide adequate operational and safety buffering. In instances where separation between third-party utilities and underground excavations is less than 5 feet, the intended construction methodology would be submitted to the owner of the third-party utility for review and approval at least 30 days prior to construction. Exploratory excavations (e.g., potholing) would be conducted, as appropriate, to verify the locations of existing facilities in the field. Construction methods would be adjusted as necessary so that the integrity of existing utility lines is not compromised. As discussed in Section 2.6.1.2 Distribution Poles, four distribution poles would need to be relocated perpendicular to the Proposed Project alignment to accommodate the Proposed Project.

2.6.3.4.3 Vegetation Clearing

Vegetation would be trimmed or removed within construction work areas and/or staging areas to facilitate the safe construction of the Proposed Project and reduce the potential for fire. However, only the minimum amount of vegetation clearing would be conducted to establish a safe work area in order to minimize erosion and sedimentation.

Vegetation removal would be completed using mechanized equipment, chainsaws, or other hand-held equipment. Following initial clearing, topsoil would be salvaged, where appropriate, to a depth of up to 6 inches or to actual depth if shallower, for on-site storage and use in site restoration. Salvaged topsoil material would be kept on site in the immediate vicinity of temporary disturbance areas or at a nearby approved work area to be used in the restoration of temporarily disturbed areas as appropriate.

2.6.3.4.4 Tree Trimming and Removal

Tree trimming and/or removal may be conducted before Proposed Project construction and wherever necessary to facilitate access to existing facilities and the work areas for proposed facilities being installed.

2.6.3.4.5 Work Area Stabilization

Work areas would be stabilized using the BMPs described in the Proposed Project-specific Storm Water Pollution Prevention Plans (SWPPPs) and as discussed in more detail in Section 3.11 Hydrology and Water Quality. The SWPPP BMPs would remain in place and would be maintained until new vegetation is established, as defined in the SWPPP(s). Typical BMPs that would be used for work area stabilization are presented in Section 2.6.5 Dust, Erosion, and Runoff Controls.

2.6.3.4.6 Grading

Grading would occur at staging and construction work areas as necessary to provide a safe work area. If required, sites would be graded to maintain the natural drainage direction and designed to prevent ponding and erosion.

Based on preliminary grading design, earthwork activities would result in approximately 8,185 cubic yards of cut and approximately 7,584 cubic yards of fill. Approximately 7,584 cubic yards of the total cut material are planned for reuse, and the remaining 601 cubic yards would be hauled off-site to Inland Pacific Resource Recovery, Sycamore Landfill, or another approved facility.

Grading is not anticipated to be required for work within the Suncrest Substation.

2.6.3.5 Transmission Line Construction (Aboveground)

2.6.3.5.1 Poles/Towers

Approximately 73 poles, inclusive of the six riser structures, would be installed for the transmission components of the Proposed Project. The approximate average depth and diameter of excavation for the Proposed Project structures are summarized in Table 2-3: Overhead Transmission Summary.

The transmission structures would be designed with sufficient conductor and ground wire spacing so that raptors cannot simultaneously contact two conductors or one conductor and a ground wire, which could cause electrocution (Avian Power Line Interaction Committee [APLIC] 2006).

Pole/Tower Removal

No existing transmission poles would be removed as part of the Proposed Project.

Pole/Tower Installation

Drilled Pier Foundation Poles

Installation of drilled pier foundation poles would begin with the excavation of holes measuring 6 to 9 feet in diameter and 20 to 40 feet in depth, depending on soil conditions and load requirements. Holes would be drilled using a truck-mounted auger or similar equipment, and would excavate approximately 25 to 95 cubic yards of soil, depending on the foundation diameter and depth. Steel reinforcement cages and anchor bolts would then be placed into the drilled hole. The hole would then be filled with concrete, typically using a tremie pipe for proper placement and the avoidance of segregation. The poles would then be delivered to the site via truck and/or helicopter, placed with a small crane and/or helicopter, and bolted to the reinforced concrete foundation. The permanent footprint required to install each steel pole drilled pier foundation for the proposed 230 kV transmission line would range from approximately 29 to 64 square feet, depending on the foundation diameter.

Micropile Foundation Poles

Installation of micropile foundation poles would begin with excavating holes measuring less than 12 inches in diameter and 20 to 35 feet in depth, depending on substrate conditions and load requirements. Holes would be drilled using a rotary-wash or similar equipment and would excavate approximately 0.6 to 1.0 cubic yards of soil, depending on the foundation depth. Steel reinforcement, typically a high-strength threaded bar, would then be placed into the drilled hole. The poles would then be delivered to the site via truck and/or helicopter, placed with a small crane and/or helicopter, and bolted to either a steel cap plate or reinforced concrete cap. The

permanent footprint required to install each micropile foundation pole for the proposed 230 kV transmission line is 1 square foot.

2.6.3.5.2 Aboveground Conductor/Cable

Wire stringing includes activities associated with installing conductors on transmission line structures. These activities include installing conductors, insulators, stringing sheaves (rollers or travelers), vibration dampeners, weights, suspension, and dead-end hardware assemblies along the entire length of the route.

Aboveground conductor installation (i.e., wire stringing) activities would be conducted consistent with the methods detailed in the Institute of Electrical and Electronics Engineers (IEEE) Standards Association Standard 524-2016, Guide to the Installation of Overhead Transmission Line Conductors. Safety devices (e.g., traveling grounds, guard structures, and radio-equipped construction crews) would be in place before wire-stringing activities begin.

The following steps describe typical wire-stringing activities:

- Sock Line Installation: Using a helicopter or a bucket truck, a lightweight sock line is threaded through wire rollers attached to each structure and is secured using a camlock device. Alternatively, helicopters may be used to fly the sock line from structure to structure.

- Pulling: The sock line would be used to pull in the conductor pulling rope and/or cable. The pulling rope and/or cable would be attached to the conductor using a special swivel joint to prevent damage to the wire and to allow the wire to rotate freely to prevent complications from twisting as the conductor unwinds off the reel. The proposed conductor would be installed by utilizing conductor tensioning equipment at the stringing site.

- Splicing, Sagging, and Dead Ending: After the conductor is pulled in, any necessary mid-span splicing would be performed. The conductor would then be sagged to proper tension and dead ended to structures.

- Clipping In: After the conductor is dead ended, the conductors would be secured to all tangent structures in a process called “clipping in.” Once this is complete, spacers would be attached between the conductors of each phase to keep uniform separation between each conductor.

Conductor installation activities would be conducted at stringing sites and structure work areas as depicted in preliminary locations in Attachment 2-A: Detailed Route Map. Temporary stringing sites along the 230 kV transmission facilities would vary in dimensions but would be a maximum of 50 feet by 200 feet. If needed, conductor splicing would be performed using compression splices applied in accordance with manufacturer specifications. Anchor poles may be used in stringing sites during conductor installation activities.

Construction methods for underground cable installation are described in Section 2.6.3.6 Transmission Line Construction (Underground).

2.6.3.5.3 Telecommunications

The Proposed Project would include the installation of approximately 11 miles of OPGW and 3.6 miles of ADSS cables on the proposed 230 kV transmission line to provide fiber optic communication for system protection, control, and operational needs. In addition to the OH installation, the Proposed Project also includes the installation of UG fiber optic segments where necessary to maintain system connectivity.

2.6.3.5.4 Guard Structures

As described in Section 2.6.3.3.4 Temporary Guard Structures, guard structures are temporary overhead facilities that would be installed at transportation and utility crossings prior to conductor installation or removal. They are designed to stop the movement of the conductor should it drop below the anticipated stringing height. As depicted in Attachment 2-A: Detailed Route Map, guard structures are anticipated to be installed at eight locations along the Proposed Project alignment. Specifically, equipped boom trucks would serve as guard structures, or temporary netting would be installed at road crossings if required by the permitting authority.

Where the use of boom trucks is not feasible, wood poles would be used to temporarily construct H-frame structures that could intercept the line should it fall. These structures would be standard wood poles with diameters of 18 to 24 inches at the base and burial depths of 8 to 10 feet. Depending on the overall spacing of the conductors being installed, two to four H-frame structures would be required on either side of a crossing. The wood poles would be installed in excavated holes and backfilled. The poles may be utilized with supporting guy wires and anchors, pole-top-mounted cross-members, and/or netting. In areas where excavation is not allowed, “flower pots” may be used to support pole bases. This would require guying, anchors, and “dead-man” blocks to support the temporary structure.

2.6.3.5.5 Blasting

Blasting is not anticipated as part of the Proposed Project.

2.6.3.6 Transmission Line Construction (Underground)

2.6.3.6.1 Trenching

Unless alternate methods are required to cross existing facilities or sensitive resources, duct banks and utility vaults would be installed using conventional trenching techniques. The duct banks would typically have a double duct bank vertical configuration, as shown in Figure 2-6: Underground Duct Bank Typical Drawing. Excavators and other earth-moving equipment would be used to establish trenches 3 to 6 feet deep and 3 to 7 feet wide depending on the duct bank configurations. Depths may vary depending on soil stability and the presence of existing substructures. The trench would be widened and shored where necessary to meet California Division of Occupational Safety and Health Administration (Cal/OHSA) safety requirements. Dewatering may be required during trenching and underground duct bank installation activities. The proposed dewatering procedures would be similar to those required to dewater overhead transmission line excavations, as described in Section 2.6.6.2 Dewatering.

At any given time, open trench lengths would not exceed those required to facilitate the installation of the duct banks. Steel plating would be placed over open trenches (if within a roadway), where appropriate, and across areas that are not under active construction.

Excavated material that is generated during trench excavation and the installation of the duct bank and vaults would be hauled off-site for disposal. Spoil would be tested in accordance with applicable standards for hazardous materials if suspected of containing deleterious substances. Where excavation occurs in unimproved areas, such as near the riser poles on the proposed 230 kV western UG segment and near the Suncrest Substation on the proposed 230 kV eastern UG segment, instead of hauling off, excavated material may be used as backfill if deemed suitable. Within paved roadways, it is anticipated that all of the excavated material would be hauled offsite. For every 1,000 feet of trench, approximately 1,204 cubic yards of material are anticipated to be excavated. Of the 1,204 cubic yards, the majority would be transported to the Sycamore Landfill or another suitable location, while a small amount would remain onsite for use as backfill material. Backfilled material would be compacted for stability and to prevent future settling.

If existing concrete must be removed to facilitate trenching, concrete saws and other pavement-breaking machines would be used. If this equipment cannot access the required removal areas, jackhammers would be used on an as-needed basis to break up concrete.

2.6.3.6.2 Duct Bank Installation

As the trenches for the underground duct banks are excavated, cable conduits (separated by spacers) would be installed, and then concrete would be poured around the conduits to form the duct banks. Each duct bank would typically consist of 6- to 8-inch-diameter polyvinyl chloride conduits that house the electrical cables. An approximately 4-inch-diameter conduit would also be included to house communication cables. The dimensions of the duct banks would be approximately 3 feet wide and 3 feet high.

Once the duct banks are installed, approximately 9.9 cubic yards of engineered backfill would be placed over the duct banks to a minimum depth of approximately 3 feet and compacted. The surface would be paved and/or returned to the pre-construction grade, contour, and condition. Each duct bank would have a minimum cover of 36 inches. While the completed trench sections are being restored, additional trench lines would be opened farther down the alignment. This process would continue until the entire duct bank is in place.

2.6.3.6.3 Cable Pulling, Splicing, and Termination

After installation of the duct bank, cables would be pulled through the conduit. Each cable segment would be pulled into conduit, spliced at each vault along the route (if applicable), and terminated at the transition where the lines convert to overhead. To pull the cable through the conduits, a cable reel would be placed at one end of the section, and a pulling rig at the other. A large rope would then be pulled into the conduit using a fish line and attached to the cable-pulling eyes. The cable-pulling eyes would then be connected to the conductor, and the cable would then be pulled through the duct. A lubricant would be applied to the cable as it enters the conduit to decrease friction during pulling. A similar process would also be used to pull the associated communication cables into the dedicated communication conduit.

2.6.3.7 Distribution Pole Construction

Pole Removal

As depicted in Attachment 2-A: Detailed Route Map, four existing distribution poles would be removed and relocated adjacent to the proposed 230 kV OH segment, representing the only planned demolition activities associated with the Proposed Project.

The poles would be removed using a bulldozer and an excavator. Poles may be cut into sections on-site for removal on a truck to an approved facility. Following pole removal, the void would be backfilled using native spoils previously excavated from the vicinity or imported fill. Excess removed material may be stored temporarily at work sites and ultimately loaded into dump trucks for disposal at an approved facility.

Pole Installation

Direct-Bury Steel Poles

Installation of direct-bury steel poles would begin by excavating holes approximately 3 feet in diameter and 6 to 13 feet deep, depending on the type and height of the pole. Holes would be drilled using a truck-mounted auger or similar equipment, excavating between 2.1 and 3.1 cubic yards of soil. The poles would then be delivered to the site via truck and placed with a small crane. The annular space between poles and holes would then be backfilled with concrete. Any remaining pole hole spoil would be placed around the holes, spread at adjacent areas or along access roads, or disposed of off-site at an approved facility. The permanent footprint required to install each steel pole is 4.9 square feet. Four distribution poles would be installed using direct burial.

2.6.3.8 Suncrest Substation

2.6.3.8.1 Substation Modifications

The proposed modifications to SDG&E's existing Suncrest Substation would include installing a 500/230 kV transformer bank (i.e., Bank 82), foundations, oil containment, fiberglass grating, and firewalls to separate each single-phase unit.

Modifications to the substation would begin with site preparation, followed by installation of foundations and underground equipment, and then installation and testing of electrical equipment. Following site preparation, all necessary below-grade construction (including structure and equipment foundations, underground ducts, and ground grid) would begin. Once all earthwork and below-grade work are completed, major equipment and structures would be installed and anchored to their respective foundations. It is anticipated that all major electrical and substation equipment (e.g., power transformers, reactors, power circuit breakers, control enclosure, and reactors) would be delivered to the substation footprint and placed directly on the previously constructed foundations. Other substation equipment (e.g., air disconnect switches, instrument transformers, transmission structures, insulators, conductors, rigid bus, connectors, conduit, cable trench, and rebar) would be received and temporarily stored in the staging area before installation. Transmission interconnection line terminations would be completed inside the substation following the final installation of the equipment. Existing telecommunications,

control, and protection, and SCADA systems within the substation boundaries would be modified as needed to accommodate the equipment additions.

2.6.3.8.2 Civil Work

No civil work[14] is proposed within the Suncrest Substation.

2.6.4 Public Safety and Traffic Control

2.6.4.1 Public Safety

The Proposed Project alignment generally traverses rural areas, and the population density along it is low and largely non-urbanized. Safety considerations during construction are proposed due to the potentially steep terrain and use of heavy construction equipment in rural areas.

Safety considerations during construction could include the following:

- ramifications from spills of fuels or hazardous materials,
- work being performed along public roadways and within waterways,
- movement of construction equipment and materials along public roadways and within waterways,
- helicopter use and suspended loads,
- fire risks from welding and/or heavy equipment use,
- open excavations, and
- de-energized conductor being dropped during wire stringing.

Measures addressing public safety are discussed further in Chapter 3 – Environmental Impacts and Mitigation Measures.

2.6.4.2 Traffic Control

Traffic impacts are not anticipated during modifications to the Suncrest Substation. However, temporary traffic impacts may occur during the construction of the proposed 230 kV transmission line. SDG&E would follow established safety practices, such as installing barriers and signage to notify the public of construction activities.

Traffic control procedures may be implemented intermittently along Vista de Montemar, La Cresta Road, Mountain View Road, Al Bahr, Road, Canyon Rim Drive, Harbison Canyon Road, Dehesa Road, Sequan Truck Trail, Japatul Road, and adjacent roadways within San Diego County during construction and times of deliveries. It is anticipated that one lane would be closed during construction along La Cresta Road, Mountain View Road, and Al Bahr Road to install the proposed 230kV western UG segment, while other roads would only experience brief traffic control during equipment unloading, overhead stringing operations, and other construction activities that would be performed within or in close proximity to roadways. In addition, trails, paths, or driveways that connect to roadways within the Proposed Project may be impacted if

[14] Civil work typically includes activities such as such as site preparation, foundation construction, and access road construction.

brief closures are required for public safety. Restrictions would be temporary, and detours are not expected.

Lane closures associated with the proposed 230 kV western UG segment are anticipated to be 40 to 500 feet in length. Lane closures associated with the proposed 230 kV OH segment would be commonly associated with wire stringing preparation, such as the installation of guard structures and equipment staging near roadways. These lane closures are anticipated to be 100 to 200 feet in length and would likely require reverse flow traffic control[15].

Before construction, appropriate traffic control measures would be configured at egress and ingress locations within each work area on roadways, including lighting, flaggers, traffic control cones, electronic signage, and fixed roadway warning signs. Long-term road closures are not expected, although one-way traffic controls and short-term closures would be implemented to support certain construction activities and maintain public safety. SDG&E would secure encroachment permits and traffic control permits from the County as required and would implement the corresponding traffic control plans before any lane closures.

Lane closures during O&M activities would follow the same procedures as during construction activities. It is anticipated that typical O&M activities would result in lane closures of 100 to 200 feet with reverse flow traffic control.

2.6.4.3 Security

As discussed in Section 2.6.3.2.2 Staging/Fly Yard Preparation, the perimeter of the staging areas would have a physical security system that would consist of a chain-link locking gate measuring 6 to 8 feet tall. Additional security measures may include on-site security personnel, cameras, and motion lighting.

2.6.5 Dust, Erosion, and Runoff Controls

Construction can generate dust and expose soils to erosion. Construction practices to reduce dust and erosion, and to control runoff, are described in the subsections that follow.

2.6.5.1 Dust

During construction, appropriate measures would be taken to minimize fugitive dust generation, as outlined in Section 3.4 Air Quality. Water or other suitable dust suppressants (i.e., non-toxic soil binders) would be applied to unpaved Project access roads and work areas; stockpiled materials would be covered or otherwise stabilized as needed to control fugitive dust. In addition, work areas would be limited to the minimum size necessary to facilitate safe construction and reduce soil exposure to wind. Likewise, vegetation would be left in places where feasible and not removed for construction.

[15] Reverse flow traffic control, also known as contraflow lane reversal, involves reversing the direction of traffic in one or more lanes to provide additional lanes for traffic flow.

2.6.5.2 Erosion and Runoff

During construction, soils would become exposed to erosion from grading, excavation, and other soil-disturbing activities. SDG&E would obtain and comply with the Construction Stormwater General Permit Order 2022-0057-DWQ and implement the measures identified in the required SWPPP to control erosion and runoff and minimize subsequent sedimentation effectively. Additional details on soil and soil-disturbing activities are provided in Section 3.8 Geology, Soils, and Paleontological Resources and Section 3.11 Hydrology and Water Quality.

2.6.6 Water Use and Dewatering

2.6.6.1 Water Use

Water trucks would be used during construction activities for dust control, fire suppression, and soil compaction during certain earthwork activities. Water would be obtained from one or more sources, including municipal water sources or water supply vendors. During peak construction periods, one to two water trucks, each with a typical capacity of up to 5,000 gallons, would be needed daily to control dust on an approximately 3-mile-long, 14-foot-wide road. 5 million to 10 million gallons of water would be required on-site during the construction of the Proposed Project.

Construction crews would be responsible for providing their own drinking water. The Proposed Project would not require additional water sources for O&M activities beyond those currently used at the substation.

2.6.6.2 Dewatering

In instances where groundwater is encountered, excavations would be dewatered using one or more pumps, and the water would be either discharged on site to an upland location, if permitted, or stored in Baker tanks or similar water-retention equipment within staging areas before off-site disposal. Typically, groundwater encountered in excavations is pumped directly into water trucks and transported to a temporary storage location or discharged onto access roads and work areas for dust control. In all cases, water discharges would be conducted in accordance with all applicable federal and state regulations and in a manner that minimizes erosion and avoids impacting surface waters in the vicinity.

2.6.7 Hazardous Materials and Hazardous Waste Management

2.6.7.1 Hazardous Materials

Construction of the Proposed Project would require the limited use of hazardous materials (e.g., fuels, lubricants, mineral oil, cleaning solvents, and chemicals). All hazardous materials, including those listed in Table 3.10 3: Hazardous Materials Typically Used During Construction of Section 3.10 Hazards and Hazardous Materials, would be stored, handled, and used in accordance with applicable regulations. Safety Data Sheets (SDSs) would be made available to all workers at the construction site. Based on the anticipated volume of hazardous liquid materials (e.g., fuel) that would be stored and dispensed at a staging area, a Spill Prevention, Control, and Countermeasure (SPCC) Plan for the Suncrest Substation would be updated to reflect any increase in the volume of hazardous materials that are stored on site during the O&M

phase of the Proposed Project. Hazards and hazardous materials are discussed in greater detail in Section 3.10 Hazards and Hazardous Materials.

Although not expected, if pre-existing hazardous waste is encountered on the Proposed Project site, it would be removed and disposed of in accordance with state and federal regulations. It is not anticipated that pesticides would be used during construction.

2.6.7.2 Hazardous Materials Management

The construction of the Proposed Project would require the limited use of hazardous materials (e.g., fuels, lubricants, cleaning solvents, and chemicals). Additionally, the Proposed Project would include transformers containing mineral oil, which is considered a hazardous material in California. Potentially hazardous waste sources during construction include contaminated soils, incidental spill waste, and concrete washout.

Before construction, a Hazardous Materials Management Plan (HMMP) would be prepared to describe protocols for the use, transport, storage, management, and disposal of hazardous materials. Construction would not begin until the SPCC Plan and HMMP are complete. The plans would be prepared in accordance with relevant state and federal guidelines and regulations (e.g., Cal/OSHA). The HMMP would include the following information related to hazardous materials and waste, as applicable:

- a list of hazardous materials present on site during construction and O&M to be updated as needed, along with product SDS and other information regarding storage, application, transportation, and disposal requirements;
- a Hazardous Materials Communication Plan;
- assignments and responsibilities of Proposed Project Health and Safety roles;
- standards for any secondary containment and countermeasures that would be required for hazardous materials; and
- spill response procedures based on product and quantity.

The procedures would include the materials to be used, location(s) of such materials within the Proposed Project work areas, and disposal protocols, as well as protocols for the management, testing, reporting, and disposal of potentially contaminated soils or groundwater observed or discovered during construction. This would include termination of work in the area of suspected contamination, sampling by a Cal/OSHA-trained individual, and testing at a certified laboratory.

Depending on the amount of hazardous materials stored on site during construction and the duration that the hazardous material is stored, SDG&E's contractor may be required to prepare a Hazardous Materials Business Plan (HMBP) and submit it electronically through the California Environmental Reporting System. The need to prepare an HMBP would not be known until immediately before or shortly after construction has commenced.

Hazardous waste would be disposed of properly and in accordance with all applicable federal, state, and local laws, including the Resource Conservation and Recovery Act, which allows the U.S. Environmental Protection Agency to control the generation, transportation, treatment, storage, and disposal of hazardous waste. Hazards and hazardous materials are discussed in greater detail in Section 3.10 Hazards and Hazardous Materials.

2.6.8 Waste Generation and Management

2.6.8.1 Organic Waste

Organic waste anticipated from the Proposed Project would include waste associated with tree trimming and vegetation removal. Organic waste volumes are conservatively estimated to total up to 107,219 cubic yards. Organic waste would be disposed of at the Inland Pacific Resource Recovery, Sycamore Landfill, or another approved facility. Organic waste would be disposed of in accordance with all applicable federal, state, and local laws regarding organic waste, including the County of San Diego requirements.

2.6.8.2 Solid Waste

Solid waste generated during construction would primarily be non-hazardous, including metal, paper, and plastic packaging. Construction debris volumes are estimated to total up to 2,340 cubic yards. Earthwork associated with the Proposed Project would require cut-and-fill at some pole sites and for the construction of access roads, but a balanced cut-and-fill approach is planned. Should any excess fill material remain after grading is complete, it would be minimal. If possible, recyclable construction material would be transported to an approved recycling facility. Construction waste that cannot be recycled would ultimately be disposed of at the Waste Management Refuse and Recycling facility, Sycamore Landfill, or another approved facility. Construction waste would be disposed of properly and in accordance with all applicable federal, state, and local laws regarding solid waste, including, but not limited to, the California Integrated Waste Management Act of 1989, which sets reduction rates for solid waste sent to landfills.

2.6.8.3 Liquid Waste

Liquid waste streams anticipated for the Proposed Project would primarily include sanitary waste and stormwater runoff. Sanitary waste from self-contained portable toilets would be routinely pumped as needed and delivered to a sanitary waste facility for disposal. The sanitary waste generated is estimated at 1,825 gallons per week per 35 workers on site. Sanitary waste would be transported by licensed sanitary waste service providers to their contracted treatment, storage, and disposal facility for off-site disposal.

Stormwater runoff would be managed in accordance with a SWPPP prepared to comply with the State Water Resources Control Board (SWRCB) Construction Stormwater General Permit Order 2022-0057-DWQ and approved by the San Diego Regional Water Quality Control Board (RWQCB).

2.6.9 Fire Prevention and Response

2.6.9.1 Fire Prevention and Response Procedures

Although further discussed in Section 3.21 Wildfire and depicted in Figure 3.21-2: Fire Hazard Severity Zones and Fire Protection Responsibility Areas, a majority of the Proposed Project

would be in an area designated as a very high Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE 2025) or within a CPUC-designated High Fire-Threat District (CPUC 2025a). Tree trimming and vegetation removal would be implemented, as necessary, to reduce combustible material within the Proposed Project work areas. San Diego County fire stations would provide fire response services.

The Proposed Project includes an APM for SDG&E to follow the guidelines provided in the 2023-2025 Wildfire Mitigation Plan, which is provided in Attachment 2-C: Wildfire Mitigation Plan. In addition, as referenced in the Wildfire Mitigation Plan, SDG&E would adhere to the guidelines in the 2023 Electric Distribution Design Manual (SDG&E 2023b) when designing the Proposed Project. The Wildfire Mitigation Plan includes SDG&E's comprehensive wildfire mitigation strategy, which aims to reduce wildfire risk, promote reliability, and enhance situational awareness and preparedness.

To fully mitigate any potential fire hazards during construction, a Proposed Project-specific Construction Fire Prevention Plan (CFPP) would be prepared and implemented. SDG&E would submit the Proposed Project-specific CFPP to the CPUC for review after issuance of the Permit to Construct (PTC) and before requesting the Notice to Proceed.

2.6.9.2 Fire Breaks

During construction activities that are considered "hot work" (e.g., welding, grinding, or any other activity that creates hot sparks), a 10-foot buffer around that activity would be implemented, and vegetation would be cleared to bare ground so that sparks do not create a fire. For activities that do not produce sparks but still have the potential to produce a fire hazard (e.g., ground rod or ground wire installation), a 5-foot buffer would be cleared of vegetation. Additional details (i.e., handling sparks) and precautionary measures would be provided in the CFPP.

Under Section 35 of GO 95, the CPUC regulates all aspects of the design, construction, and O&M of electrical power lines, as well as fire safety hazards, for utilities subject to its jurisdiction (CPUC 2020). In addition, Fire Prevention Standards for Electric Utilities (Title 14 Cal. Code Regs. Sections 1250-1258) provide definitions, maps, specifications, and clearance standards for projects under the jurisdiction of PRC Sections 4292 and 4293 in State Responsibility Areas. SDG&E would continue to maintain a fire break around the Suncrest Substation in accordance with all applicable state and federal regulations. The fire break would include maintaining a 10-foot vegetation-free buffer zone around the substation's fence. Section 2.6.12.4.5 Vegetation Management provides a more detailed discussion of vegetation management.

2.6.10 Construction Workforce, Equipment, Traffic, and Schedule

2.6.10.1 Construction Workforce

Construction of the Proposed Project and modifications to the existing substation would occur simultaneously. Typically, approximately four to five crews, each composed of roughly five workers, would work concurrently along the alignment. Peak employment is anticipated at approximately 75 workers per day, but the average on-site workforce would be lower (approximately 40 workers per day). Peak total vehicle round-trips during the construction

period would be approximately 148 per day, consisting of roughly 125 automobile round-trips and 23 truck round-trips. Additionally, workers would commute to the Proposed Project sites from adjacent areas and would utilize options such as vanpools and carpools to reduce their reliance on single-occupancy vehicles. Crews and equipment may also be transported by the contractor's outfitted crew trucks, designed to haul both construction crews and their equipment. Any traveling workers who did not return home between workdays would obtain temporary off-site accommodation (e.g., hotels or other short-term rentals in the region) during construction. Hotels and short-term rentals are available in the vicinity of the Proposed Project. No on-site temporary housing would be constructed.

2.6.10.2 Construction Equipment

The equipment that would be used to construct each Proposed Project component, along with its approximate duration of use, is provided in Attachment 2-B: Proposed Construction Equipment and Workforce. In addition to the proposed construction equipment and workforce, it is anticipated that two to three construction trailers, measuring 16 to 20 feet in length, would be required.

2.6.10.3 Construction Traffic

Construction vehicles and equipment would typically access the Proposed Project from roadways, including Greenfield Drive, East Man Street, High Glen Road, Vista de Montemar, La Cresta Road, Mountain View Road, Al Bahr, Road, Canyon Rim Drive, Harbison Canyon Road, Dehesa Road, Sequan Truck Trail, Japatul Road, Lyons Valley Road, and adjacent roadways. Although some disruption to traffic flow may occur when trucks ingress or egress from the Proposed Project work areas, such events would be periodic and temporary. Signage and/or flagmen would be used, as appropriate, to reduce potential disruptions to traffic flow and to maintain public safety during construction.

Construction workers would typically meet at the staging areas each morning to park their vehicles. All construction equipment and vehicles would be parked within the staging areas while inactive and, when practical, after each workday. The staging areas are depicted in Attachment 2-A: Detailed Route Map. Table 2-8: Estimated Construction Vehicle Trips and Vehicle Miles Traveled details the estimated vehicle trips and total vehicle miles traveled (VMT) per Proposed Project component and trip type.

Table 2-8: Estimated Construction Vehicle Trips and Vehicle Miles Traveled

Proposed Project Component	Average One-Way Trips	Maximum One-Way Trips	Average VMT	Maximum VMT
Suncrest Substation Modifications	67.1	102	2,404.3	3,530
Proposed 230 kV UG Segment	19.4	92	658.9	3,090
Proposed 230 kV OH Segment	46.7	284	1,677.3	10,220
Miscellaneous	36.9	92	1,235.4	3,120

Note: This table is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

The peak vehicle trips would occur during the summer of 2028, from approximately June 2028 through August 2028, during the above-grade construction for the proposed 230 kV transmission line and site preparation for the Suncrest Substation modifications. The total maximum vehicle round-trips during this construction period would be approximately 177 per day, consisting of roughly 152 automobile round-trips and 25 truck round-trips.

Temporary lane closures may be required during the construction of the facilities. The temporary closures would be coordinated with the County and emergency service providers through the encroachment permit and traffic control permit processes, and one or more traffic control plans would be implemented as necessary. Implementation of the traffic control plans would minimize traffic impacts from the Proposed Project during construction.

2.6.10.4 Construction Schedule

Construction is anticipated to begin in August 2027 and would take approximately 5 years to complete. Construction would occur year-round or as authorized by permits and authorizations. Per the CAISO technical specifications, the Proposed Project must be energized by 2032. The complete construction schedule, outlined by construction activity, is summarized in Table 2-9: Proposed Construction Schedule.

Table 2-9: Proposed Construction Schedule

Proposed Project Construction Activity	Start Date	End Date	Approximate Number of Active Workdays
Site Surveying/Staking	08/2027	02/2031	Five
Utility Locates	08/2027	02/2031	Five
Mobilization	11/2027	12/31/2027	Five
Suncrest Substation Modifications	06/2028	08/2032	Five
230 kV UG Segment	06/2029	12/2031	Five
230 kV OH Segment	01/2028	05/2029	Five to Six
Testing and Commissioning	01/2032	10/2032	Five
Site and ROW Restoration	06/2029	03/2031	Five

Note: Active workdays exclude all Sundays and federal holidays between the start and end date for each construction phase.

Construction activities would generally be scheduled to occur during daylight hours (i.e., 7:00 a.m. to 7:00 p.m.), 6 days per week (e.g., Monday through Saturday). Construction activities would generally be limited to no more than 12 hours per 24-hour period. Construction is not anticipated on federal holidays. Night work is not expected to be necessary, but could be required in limited circumstances, such as clearance restrictions. Construction activities could be scheduled infrequently outside these hours to avoid or reduce schedule delays, complete construction activities (e.g., continuous concrete pours), accommodate the schedule for system outages, accommodate landowner or agency constraints, or address emergencies.

2.6.11 Demobilization and Site Restoration

Following construction, demobilization would begin. First, all equipment not needed for the remaining testing and revegetation would be removed. Next, all temporarily disturbed work areas would be restored to their pre-construction conditions.

Areas temporarily disturbed by Proposed Project activities would be restored to approximate pre-construction conditions or as otherwise provided by proposed or existing easements. All areas would be carefully assessed to verify that residual construction debris and waste have been removed and transported to an approved disposal facility. Proposed Project waste materials that are routinely recycled would be collected and transported to an approved recycling facility. SDG&E would conduct a final inspection to verify that cleanup activities are successfully completed as required. Areas that are disturbed by grading, auguring, or equipment movement would be restored to their original contours and drainage patterns, unless otherwise directed by the landowner. Work areas would be decompacted, and salvaged topsoil materials would be respread following recontouring to aid in the restoration of temporarily disturbed areas. Revegetation activities would be conducted in accordance with the Proposed Project SWPPP and APMs proposed herein. Restoration could include recontouring, reseeding, and planting replacement vegetation, as appropriate. Erosion control measures may be required and would also be implemented in accordance with the Proposed Project SWPPP and APMs. Gravel placed to facilitate construction may be left in place upon the landowner's request or hauled to a disposal facility.

2.6.12 Operation and Maintenance

The Proposed Project would be operated and maintained to meet all GO 95 requirements, including minimum vegetation and equipment clearances, in addition to the vegetation clearance requirements in PRC Section 4292 and Title 14 Cal. Code Regs. Section 1254.

2.6.12.1 Regulations and Standards

O&M of the Proposed Project would be conducted in accordance with all applicable Federal Energy Regulatory Commission, NERC, CPUC, or CAISO requirements. Any O&M work (e.g., high-voltage capital repair or replacement) would also be conducted in accordance with NESC, National Electrical Code, Cal/OSHA, and other applicable regulations and standards. SDG&E would implement its Wildfire Mitigation Plan, which is provided in Attachment 2-C: Wildfire Mitigation Plan.

2.6.12.2 System Controls and Operation Staff

The Suncrest Substation would continue to be unmanned during operations and monitored remotely by SDG&E’s Skills/Mission Control Center in Serra Mesa. Day-to-day management of the substation would continue to be conducted by SDG&E’s asset management teams based in San Diego. The substation would also continue to be monitored by CAISO’s control center in Folsom, and CAISO would have operational control of the facility with authority to direct SDG&E’s control center.

The Proposed Project facilities would be incorporated into SDG&E’s existing programs with existing equipment, experienced staff, and trusted contractors. SDG&E’s local

maintenance/technical staff, along with outside resources, would respond to maintenance issues and emergencies.

2.6.12.3 Inspection Programs for Suncrest Substation

SDG&E would continue its regular inspections of its existing substation and access roads following completion of the Proposed Project. Typical O&M activities would involve routine inspections and preventive maintenance to maintain service reliability, as well as emergency work to maintain or restore service. In general, quarterly inspections would be performed on SDG&E's existing substation to inspect each required piece of equipment in accordance with the manufacturer's recommendations. These inspections would be performed without taking the substation out of service. SDG&E typically performs biannual routine ground inspections of substation facilities using existing access roads.

2.6.12.4 Maintenance Programs

Maintenance programs would continue for existing facilities and be implemented by SDG&E maintenance personnel or qualified contractors. In the event of an emergency (e.g., environmental conditions, vandalism, or accidents), emergency repair operations would involve the prompt deployment of SDG&E maintenance personnel or qualified contractors as necessary to repair and/or replace damaged facilities.

Anticipated maintenance activities may include access road maintenance and repair; transmission line repair, replacement, and reconductoring; repair and replacement of substation components; and vegetation management.

2.6.12.4.1 Access Road Maintenance and Repair

Proposed and existing access roads would be used to access the Proposed Project components during O&M activities. Paved roads would typically not require maintenance or repair. However, unpaved roads may require minor maintenance and repairs to allow safe travel of construction vehicles and equipment. These improvements could include minor grading, vegetation trimming/removal, and/or the re-application of road base (e.g., decomposed granite).

2.6.12.4.2 Transmission Line Repair, Replacement, and Reconductoring

The proposed 230 kV transmission line would include poles or structures that support equipment, including conductors, insulators, switches, transformers, lightning arrest devices, line junctions, and other electrical equipment. To maintain uniform, adequate, safe, and reliable service, electrical equipment may need to be added, repaired, or replaced during operations. Routine maintenance of the overhead and underground segments of the proposed 230 kV transmission line is expected to require approximately one trip per year by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. If no vehicle access exists, the crew and material would be flown in by helicopter.

Annual comprehensive checks and maintenance would be performed by SDG&E maintenance personnel or qualified contractors. Should structures require direct access during maintenance, overland access would be utilized consistently with easement access rights and in coordination with the landowner.

2.6.12.4.3 Insulator Washing

As the Proposed Project would include the installation of toughened glass insulators and braced line post insulators, regular insulator washing is not required as part of O&M.

2.6.12.4.4 Suncrest Substation

It is anticipated that equipment at the Suncrest Substation would be taken out of service periodically to perform more extensive checks and maintenance on the facility's main components. Due to the diversity of equipment and the individual system components, a small, specialized team would be utilized to perform more extensive maintenance activities.

2.6.12.4.5 Vegetation Management

In accordance with SDG&E's Vegetation Management Program and fire break clearance requirements in GO 95, PRC Section 4292, and Title 14 Cal. Code Regs. Section 1254, SDG&E would trim or remove flammable vegetation in the area surrounding the Proposed Project and all other safety hazards. Tree limbs that contact electric power lines can cause power outages and arcing that can serve as an ignition point for wildfires. The proposed 230 kV transmission line would be inspected annually to determine whether vegetation trimming or clearing is required, in accordance with federal and state requirements. SDG&E vegetation management activities would maintain a continuous defensible area (i.e., approximately 10 feet) around the substation and within the proposed 230 kV transmission line ROW. A small crew would typically conduct this work using mechanical equipment, including an aerial lift truck, chipper trailer, weed trimmers, rakes, shovels, and/or leaf blowers.

2.6.13 Landownership, Rights-of-Way, and Easements

2.6.13.1 Landownership

The parcels where the proposed 230 kV transmission line would be constructed are privately owned or owned by utilities or public agencies (i.e., by Sweetwater Authority, the CDFW, USFS, or the County). SDG&E owns the existing approximately 36.8-acre parcel where the Suncrest Substation is located.

2.6.13.2 Existing Rights-of-Way or Easements

As detailed in Table 2-10: Existing Easements, SDG&E's existing transmission easement widths vary from 30 to 200 feet wide.

Table 2-10: Existing Easements

Transmission Line	Approximate Easement Width
TL625	Varies from undefined width to up to 30 feet
TL6914	Undefined width
TL6957	Varies from undefined width to up to 30 feet
TL23021	200 feet
Sunrise Powerlink	200 feet

2.6.13.3 Proposed or Modified Rights-of-Way or Easements

SDG&E would secure additional rights for the installation of the proposed 230 kV transmission line, access roads, and helicopter landing pads by negotiating agreements with each landowner or by pursuing legal proceedings. As detailed in Table 2-11: Permanent New Land and Right-of-Way Requirements, SDG&E's typical easement width for a single 230 kV transmission line is 200 feet. The proposed easement width for each duct bank associated with the 230 kV UG segment would be approximately 40 feet. SDG&E's typical easement width for an access road is 14 feet. SDG&E's maximum typical permanent easement width for a helicopter landing pad is 100 feet by 100 feet[16].

Table 2-11: Permanent New Land and Right-of-Way Requirements

Proposed Project Component	Approximate Length (miles)	Approximate Length (feet)	Approximate Width (feet)	Approximate Area (acres)
Proposed 230 kV western UG segment	3.05	16,096	40	14.78
Proposed 230 kV OH segment	10.97	57,934	200	266.00
Proposed 230 kV eastern UG segment	0.48	2,509	40	2.30
Proposed Access Road	0.31	1,659	14	0.87
Proposed Walking Path	0.30	1,601	2	0.06
Proposed Helicopter Landing Pad	0.02	100	100	3.81

Note: Typical widths have been provided; however, ROW would vary along each alignment, as appropriate. Final ROW widths would be determined during final engineering.

Additionally, SDG&E would obtain easements that would contain the right to remove trees anywhere within the easement that could pose a threat to the lines or adjacent resources.

2.6.13.4 Temporary Rights-of-Way or Easements

Temporary construction easements would be required for temporary construction areas (e.g., staging areas and stringing sites) and for temporary access roads located outside the permanent easements SDG&E would acquire. All temporary work area locations for the Proposed Project are depicted in Attachment 2-A: Detailed Route Map. All temporary easements would be secured by negotiating with landowners or by pursuing legal proceedings.

2.6.14 Electric and Magnetic Fields

CPUC Decision 06-01-042 requires SDG&E to evaluate no-cost and low-cost electromagnetic field measures that would be installed as part of the final engineering design for the Proposed Project.

[16] The helicopter landing pads would be located within the 200-foot-wide easement associated with the proposed 230 kV transmission line.

2.7 INTENDED USES OF THIS ENVIRONMENTAL IMPACT REPORT

This Applicant-Prepared Environmental Impact Report (EIR) has been prepared to conform to the requirements of the California Environmental Quality Act (CEQA), its implementing regulations, and General Order 131-E.

2.7.1 Anticipated Permits and Approvals

Table 2-12: Permitting Requirements and Process lists the federal, state, regional, and local permits that may be required for construction and O&M of the Proposed Project.

2.8 APPLICANT-PROPOSED MEASURES AND BEST MANAGEMENT PRACTICES

SDG&E would be responsible for overseeing the assembly of construction and environmental teams that would implement and evaluate the Proposed Project APMs. SDG&E would maintain an environmental compliance management program to allow for implementation of the APMs to be monitored, documented, and enforced during each Proposed Project phase, as appropriate. All those contracted by SDG&E to perform this work would be contractually bound to properly implement the APMs proposed to reduce potential environmental effects.

Implementation of the proposed APMs would be the responsibility of the environmental compliance team. The team would include an environmental project manager, resource specialists, and environmental monitors. All APMs would be implemented and consistent with applicable federal, state, and local regulations. The environmental compliance team would be responsible for inspecting, documenting, and reporting on SDG&E's compliance with all proposed APMs. As needed, environmental specialists would be retained to verify that all APMs are implemented adequately during the construction phase.

The APMs are listed in Table 2-13: Applicant-Proposed Measures and are described in detail in Chapter 3 – Environmental Impacts and Mitigation Measures, which includes an analysis of why each APM was selected and how it would reduce and/or minimize potential impacts. In addition, all applicable CPUC Draft Environmental Measures were considered and, as appropriate, included as APMs to further reduce potential impacts.

If conditions arise in which construction may adversely affect a known or previously unknown environmentally sensitive resource, or if construction activities significantly deviate from the Proposed Project requirements, SDG&E monitors and/or contract administrators would have the authority to halt construction activities, if needed, until an alternative method or approach can be identified. Any concerns that arise during implementation of the APMs would be communicated to the appropriate authority to determine if corrective action is required, or the concerns would be addressed on-site, as applicable. As the proposed APMs are implemented, environmental monitors would be responsible for reviewing and documenting these activities. Field notes and digital photographs would be used to document and describe the status of APMs as necessary.

Table 2-12: Permitting Requirements and Process

Agency	District/Office Representative Contact Information	Permit/Approval	Trigger	Status	Date Filed or Planned to be Filed	Date to be Approved
Federal						
FAA	Obstruction Evaluation Group California – Southern Nicholas Sanders Nicholas.Sanders@faa.gov (206) 231-2877 Vivian Vilaro, Specialist vivian.vilaro@faa.gov (847) 294-7575	Determination of No Hazard	This applies to potential obstruction of air space.	Pending	To Be Determined	Unknown
U.S. Fish and Wildlife Service (USFWS)	Region 8 (Pacific Southwest) Carlsbad Field Office 2177 Salk Avenue, Suite 250 Carlsbad, CA 92008 (760) 431-9440	Federal Endangered Species Act (FESA) Section 7 Consultation	This applies to activities occurring within critical habitat or with the potential to impact species protected by the FESA on USFS-managed land.	Pending	December 2026	April 2027
		FESA Section 10 Consultation	This applies to activities occurring within critical habitat or with the potential to impact species protected by the FESA on non-USFS-managed land.	Pending	To Be Determined	To Be Determined
USFS	Region 5 (Pacific Southwest) 1323 Club Drive, Vallejo, CA 94592 (707) 562-8737	National Environmental Policy Act Compliance/Record of Decision	This applies when federal discretionary permits are issued.	Pending	--	October 2026
		Special Use Permit	This permit is required to occupy, use, or build on USFS land for personal or business purposes, whether the duration is temporary or long term.	Submitted	October 2025	February 2027
U.S. Army Corps of Engineers (USACE)	Los Angeles District 915 Wilshire Boulevard Los Angeles, CA 90017	Rivers and Harbors Appropriation Act Section 10 Nationwide Permit (NWP) 57	This applies to construction within navigable waters of the U.S.	Not anticipated	--	--
		Clean Water Act (CWA) Section 404 NWP 57	This applies to activities associated with the discharge or placement of fill within waters of the U.S.	Not anticipated	--	--
State						
CDFW	Region 5 (South Coast) General Information AskR5@wildlife.ca.gov (858) 467-4201	California Fish and Game Code Section 2081 Incidental Take Permit	This applies to potential take of California Endangered Species Act-listed species.	Pending	September 2026	April 2027
	Region 5 (South Coast) Streambed Alteration Program R5LakeandStreambed@wildlife.ca.gov (858) 636-3160	California Fish and Game Code Section 1600 Lake and Streambed Alteration Agreement	This applies to alteration of the bed, bank, or channel of a river or stream.	Not anticipated	--	--
CPUC	Public Advisor's Office public.advisor@cpuc.ca.gov (415) 703-2074	PTC	This applies to the extension, expansion, upgrade, or other modification of existing electrical transmission facilities.	Submitted	May 2026	May 2027
State Historic Preservation Office	California Office of Historic Preservation	Section 106 Consultation	This applies to ground-disturbing activities in an area with the potential for cultural resources.	Pending	April 2026	October 2026

Agency	District/Office Representative Contact Information	Permit/Approval	Trigger	Status	Date Filed or Planned to be Filed	Date to be Approved
RWQCB	Region 9 (San Diego) rb9_questions@waterboards.ca.gov	CWA Section 401 Water Quality Certification	This applies to activities that require a federal authorization and may result in impacts to waters of the U.S.	Not anticipated	--	--
		Waste Discharge Requirement	This applies to activities that impact waters of the state; or discharge of material into waters of the state that are not considered waters of the U.S. (i.e., isolated wetlands).	Not anticipated	--	--
SWRCB	Division of Water Quality State Water Resources Control Board National Pollutant Discharge Elimination System Wastewater Unit, 15th Floor P.O. Box 100 Sacramento, CA 95812-0100 NPDES_wastewater@waterboards.ca.gov	National Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated With Construction And Land Disturbance Activities Order WQ 2022-0057-DWQ NPDES No. CAS000002	This applies to construction activities resulting in the disturbance of 1 acre or more of land.	Pending	Pending	Pending
Local						
County of San Diego	Department of Public Works Planning and Development Services 5510 Overland Avenue, Suite 110 San Diego, CA 92123 rowpermitcounter@sdcounty.ca.gov (858) 694-2055	Encroachment Permit	This applies to construction activities within the County ROW.	Pending	To Be Determined	Unknown
		Traffic Control Permit	This applies to construction activities within the County ROW.	Pending	To Be Determined	Unknown

Table 2-13: Applicant-Proposed Measures

Measure	Measure Language
Aesthetics	
APM AES-01	When construction has been completed, all temporary work areas will be restored to near pre-construction conditions in accordance with landowner agreements, in order to minimize potential visual contrast with the surrounding landscape setting.
APM AES-02	Construction activities will be kept as clean and inconspicuous as practical. Where practical, construction storage and staging will be screened from close-range residential views with opaque fencing.
APM AES-03	Non-specular conductors will be installed along the proposed 230 kV OH segment to minimize the reflectivity and general visibility of the wires.
APM AES-04	Any required lighting will be limited to individual work areas.
Biological Resources	
APM BIO-01: Conduct Biological Surveys	Biological field surveys (i.e., surveys to identify vegetation communities and land cover, aquatic features, and potential habitat for special-status plant and wildlife species) will be performed for any portion of the Project area not yet surveyed (e.g., areas that did not have landowner access, new or modified staging areas, or stringing sites) if feasible. Sensitive biological resources identified during surveys will be subject to avoidance and/or minimization in accordance with the applicable Project APMs. To prevent the potential for an inadvertent impact to sensitive resources, a qualified biologist will establish exclusion zones demarked as Environmentally Sensitive Areas (ESAs). When appropriate, a qualified biologist will attend tailboard meetings to review ESAs to be protected with construction crews on a site-specific basis.
APM BIO-02: Develop and Implement a Habitat Restoration Plan	SDG&E will develop and implement a Habitat Restoration Plan (HRP) for the restoration of temporary construction areas as practicable after work is complete. Restoration activities will be conducted in accordance with negotiated agreements with landowners and in compliance with applicable permits.
APM BIO-03: Biological Monitoring	A qualified biologist will monitor construction activities within suitable special-status species habitat that may impact sensitive biological resources as feasible. The qualified biologist will be a person who has the educational background, training, and work experience (i.e., handling experience or permits) required to perform a specific biological task. The monitor will have the authority to stop work activities upon the discovery of sensitive plant or wildlife species that could be adversely impacted by construction.
APM BIO-04: Delineation of Work Areas	All work areas within the Project area will be clearly delineated prior to construction commencing with fencing, staking, or flags. Construction activities will be restricted to delineated work areas, and all delineation will be maintained in working order until completion of construction.

Measure	Measure Language
APM BIO-05: Training Program	All SDG&E personnel and contractors working within the Project area will participate in SDG&E's Worker Environmental Awareness Training (WEAP). The WEAP will include an overview of roles and responsibilities, a summary of Project requirements, identification of sensitive resources, and contact information for key Project personnel.
APM BIO-06: No Harm to Wildlife	No wildlife, including rattlesnakes, will be intentionally harmed, except to protect life and limb. Feeding wildlife will not be allowed. In addition, plants or wildlife will not be collected as pets or for any other reason.
APM BIO-07: Vehicular Conduct	Vehicles will be kept on access roads and within approved work limits. A speed limit of 15 miles per hour (mph) will be observed on dirt access roads to allow wildlife to disperse. A speed limit of 5 mph will be observed within staging yards. Vehicles will be turned around in established or designated areas only. Parking or driving underneath oak trees will not be allowed, except in established traffic areas, to protect root structures.
APM BIO-08: Trash Management	Project personnel will not deposit or leave any food or waste on the ROW or adjacent property. In addition, all trash receptacles used on the Project will have securely closed lids.
APM BIO-09: Wildfire Prevention	Wildfires will be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters or vehicle parts can ignite dry vegetation. Construction vehicles and equipment will carry fire tools (e.g., water backpack pumps, shovels, Pulaskis, and/or fire extinguishers) while operating in the field in accordance with the most current SDG&E and/or agency fire prevention standards and practices.
APM BIO-10: Equipment Placement	All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur in designated areas at least 100 feet from of waters of the U.S. or waters of the State to the extent practicable. These designated areas will be operated in a manner to prevent spills and any runoff from entering aquatic resources through the use of materials (e.g., drip pans) that prevent fuel, oil, or coolant from contacting soils. Contractor equipment will be checked for leaks prior to operation and repaired as necessary. If equipment repair is necessary at any of the other approved work areas, all trucks, tools, and equipment will be kept on existing access roads, over containment or on cleared areas to the extent practicable.
APM BIO-11: Off-Road Hiking	Hiking off roads or paths for survey data collection will be allowed year-round if it does not impact sensitive resources.
APM BIO-12: Project Lighting	If night work is necessary, night lighting will be of the lowest illumination necessary for operational safety, selectively placed, shielded, and directed away from natural habitats as needed. Any permanent lighting adjacent to all on- or off-site habitat will be directed away from natural habitats and/or shielded so as not to illuminate those habitats.
APM BIO-13: Invasive Species Prevention	Field crews will coordinate with a qualified biologist to implement preventative invasive species control best management practices (BMPs) found in Prevention BMPs for Transportation and Utility Corridors California Invasive Plant Council (Cal-IPC) (Cal-IPC 2012).
APM BIO-14: Tree Trimming	A qualified biologist will perform a pre-construction survey when tree trimming is planned in environmentally sensitive areas. Tree trimming will occur in accordance with proper pruning methods per arborist and utility standards.

Measure	Measure Language
APM BIO-15: Trapped Animal Prevention	Supplies and equipment where wildlife could hide (e.g., culverts and pole holes) will be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected or from which animals cannot be removed will be capped or otherwise covered at the end of each workday. Old piping or other supplies that have been left open will not be capped until inspected, and any species found within will be allowed to escape on their own or moved by a qualified biologist. All excavated holes/trenches that are not filled at the end of a workday will be covered, or a wildlife escape ramp will be installed to prevent the inadvertent entrapment of wildlife species when necessary. If an animal is found entrapped in supplies or equipment (e.g., a pipe section), the supplies or equipment will be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by a qualified biologist. All steep-walled trenches or excavations used during construction will be inspected twice daily (i.e., in the early morning and evening) to protect against wildlife entrapment. If wildlife are located in the trench or excavation, the qualified biologist will be called immediately to remove them if they cannot escape unimpeded.
APM BIO-16: Special-Status Species Avoidance	Dens and burrows of special-status species will be flagged and avoided, to the extent practicable or approval obtained through consultation with resource agencies, as applicable.
APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	The proposed 230 kV transmission line and modifications to the existing Suncrest Substation will be designed to adhere to the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006, 2012) or other industry leading modern technology recommended by resource agencies or APLIC. SDG&E will also develop a Nesting Bird Management Plan (NBMP) that adheres to these guidelines and provides provisions to minimize collision and electrocution risk to avian species during Project activities.
APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code	SDG&E will prepare a NBMP to avoid and minimize impacts to birds and their nests protected under the MBTA and California Fish and Game Code. The NBMP plan will describe nesting bird survey triggers, requirements (initial and refresh intervals) and the process to avoid impacts to nesting birds discovered during construction. The NBMP will include protocols for construction around active resources and communication with applicable agencies.
Cultural Resources	
APM CUL-01: Project Redesign	SDG&E will seek to redesign the proposed alignment to substantially lessen the potential for significant impacts to archaeological sites that have either been determined eligible to the CRHR or are assumed eligible for the purpose of the Project. If SDG&E is unable to redesign the alignment to avoid the potentially eligible archaeological sites, then the archaeological sites will need to undergo testing in order to evaluate them for eligibility to the CRHR (see APM CUL-02). Based on the preliminary design, six pole locations or associated workspaces could impact the following archaeological sites:

Measure	Measure Language
APM CUL-02: Archaeological Site Testing and Evaluation	For significant archaeological resources that cannot be avoided through design modifications, SDG&E will prepare a Testing Plan consistent with federal (36 CFR 800.4(b)), if on federal land, and state (CEQA Guidelines §15064.5) requirements. Testing may include Shovel Test Probes (STPs) and Test Excavation Units (TEUs) designed to determine site boundaries, integrity, and eligibility for the NRHP/CRHR. Evaluation efforts will be confined to areas within the direct impact footprint plus a minimal buffer. Native American monitors will be scheduled to be present during fieldwork at precontact resources. Where testing confirms site significance and avoidance remains infeasible, data recovery will be implemented under an approved, SDG&E-prepared Data Recovery Plan to reduce potential effects to a less-than-significant or less-than-adverse level.
APM CUL-03: Cultural Resources Survey	Prior to final design, a qualified archaeologist will conduct focused cultural resources surveys in any previously uninspected areas, such as new or modified work areas, and/or revised access routes or work pads outside of the previous survey corridor.
APM CUL-04: Environmentally Sensitive Area Demarcation	SDG&E will utilize the survey results to identify archaeological resources determined to be eligible or potentially eligible for the NRHP/CRHR, delineate Environmentally Sensitive Areas (ESAs) for avoidance. ESA boundaries will be established with a buffer of approximately 50 feet beyond the known resource limits using temporary fencing or flagging clearly visible to construction crews. An archaeologist will verify ESA integrity throughout construction. Limited work (e.g., vegetation trimming) may be permitted within ESAs if no ground disturbance occurs and an archaeological monitor is present.
APM CUL-05: Utilize Existing Disturbance Areas	Unpaved access road use across eligible or potentially eligible archaeological sites will be restricted to rubber-tired vehicles only; tracked vehicles may be used only with protective matting or capping. When unpaved existing roads cross known eligible or potentially eligible archaeological sites, no grading or excavation will occur within the site boundaries. Required road maintenance within site boundaries will employ hand tools to level the roadbed or fill depressions. If required, fill material will be sourced from outside the archaeological site.
APM CUL-06: Archaeological Monitoring	SDG&E will conduct archaeological and Native American monitoring for earth-disturbing activities within 50 feet of eligible or potentially eligible archaeological sites and ESAs. The archaeological monitor will flag sensitive areas and coordinate with construction personnel to verify that avoidance measures are followed. In the event of an inadvertent discovery, work will stop within the immediate area until the Principal Investigator (PI) and SDG&E archaeologist determine an appropriate course of action consistent with CEQA, AB 52, and, where applicable, Section 106 of the NHPA. Isolate resources will not constitute a discovery.

Measure	Measure Language
APM CUL-07: Unanticipated Discovery of Human Remains	If human remains are encountered during construction, SDG&E will comply with California State law (Health and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98 and 5097.99). This law specifies that work will stop immediately in any areas where human remains or suspected human remains are encountered. SDG&E will be notified of any such discovery and then contact the Office of the Medical Examiner. The Medical Examiner has two working days to examine the remains after being notified by SDG&E. Under some circumstances a determination may be made without direct input from the Medical Examiner (e.g., when the remains can be positively identified by the archaeologist as being non-human). When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the NAHC. The NAHC will immediately notify the identified most likely descendant (MLD) and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 24 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and MLD, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.
Geology, Soils, and Paleontological Resources	
APM GEO-01: Geotechnical Engineering Report	SDG&E will review the recommendations and findings of a final geotechnical engineering report and the contractor's Geotechnical Engineer regarding the potential for seismic activity, landslides, expansive soils, slope instability and differential settling. SDG&E will incorporate those recommendations, as appropriate, into the final design of the Project.
Hydrology and Water Quality	
APM HYD-01: Minimize Impacts to Aquatic Features	The final Project design will avoid impacts to aquatic features to the maximum extent practicable. Construction methods (e.g., HDD, horizontal boring, and trenching below an aquatic feature) will be used to avoid direct impacts to aquatic features to the greatest extent feasible. If an aquatic feature cannot be avoided, SDG&E will obtain the appropriate permits from the applicable state or federal agencies prior to impacting the water features. Mitigation for permanent impacts will be secured at a one-to-one ratio or as otherwise defined in the permits.
APM HYD-02: Maintain Existing Flow and Drainage Contours	All temporary work areas disturbed during grading will be restored to their original contours, and the surrounding area will be restored and repaired, as appropriate. Permanent work areas will be designed to maintain existing flow patterns and flow velocities.

Measure	Measure Language
APM HYD-03: Jurisdictional Aquatic Resources Field Survey	Prior to any ground disturbance or vegetation-clearing activities in areas where a jurisdictional delineation survey was not previously conducted due to property access restrictions[17], a field survey will be conducted to identify potentially jurisdictional aquatic resources within the work areas. If jurisdictional aquatic resources are observed to be located within the work areas during the survey, APM HYD-01 will be implemented to either avoid impacts or obtain permits for the impacts.
Noise	
APM NOI-01: Restrict Construction Work Periods	Construction equipment operation will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, and no construction operation will occur on Sundays or holidays. If construction activities are required outside of these hours, SDG&E will obtain written authorization from the County, as appropriate, to perform construction activities outside of the allowed hours stipulated in the applicable municipal ordinance. Official copies of the written authorization will be submitted to the California Public Utilities Commission (CPUC) before initiating any work outside the hours listed previously.
Recreation	
APM REC-01	SDG&E will post signage at access points to recreational facilities that may be subject to access restrictions due to the Project no less than four weeks prior to the beginning of construction activities within or adjacent to the facilities. In addition, SDG&E will coordinate with the appropriate agency so that notification can be posted to the recreational facility's website. The website and signage will notify users of the impending construction activities, construction impacts (e.g., increased noise and dust), the affected locations, and the estimated duration of any necessary temporary closures or access restrictions. Contact information for the Project's public liaison will be provided on the signage, and the public liaison would address any complaints related to dust, noise, and access restrictions.
APM REC-02	Authorities for recreational facilities that may be subject to access restrictions will be directly contacted and given advance notice of Project activities no less than four weeks prior to construction.

[17] Although further discussed in Attachment 3.11-A: Aquatic Resources Delineation Report in Section 3.11 Hydrology and Water Quality, some portions of the Proposed Project were not accessed during the field surveys due to either the lack of landowner access permissions or the steep topography and/or impenetrable vegetation. Therefore, these areas were not surveyed in the field. These inaccessible areas were assessed with binoculars from nearby vantage points while in the field and via a desktop review.

Measure	Measure Language
Tribal Cultural Resources	
APM TRIB-01	Should a previously unidentified tribal cultural resource be discovered during the course of the Project's site preparation, grading, excavation, construction, or other activity, all operations within 50 feet of the discovery will cease and SDG&E's Cultural Resource Specialist will be immediately contacted. The Principal Investigator, Native American monitor, and SDG&E's Cultural Resources Specialist will determine if additional cultural resources work is needed to evaluate the discovery, or if a formal evaluation is required. If the tribal cultural resource is listed or eligible for listing on the NRHP, CRHR, or a local register, the resource will either be avoided, preserved in place, or treatment will be determined during tribal consultation. Ground-disturbing work in the vicinity of the discovery will not resume without authorization by the CPUC and after the appropriate consultation has taken place with interested Native American Tribes.
Wildfire	
APM FIRE-01: SDG&E FPP	SDG&E's FPP will be implemented across the entire Project area during construction. It will also be utilized for O&M activities, except on Project areas on the CNF, which will follow SDG&E's CNF O&M FPP. SDG&E's FPP will include the following at a minimum: • minimizing sources and implementing operational practices of reducing the risk of ignition; • operational practices for reducing the risk of ignition; • minimizing fire threats with readiness and awareness; • an enhanced vegetation management and clearance program; • community outreach and public awareness; • coordination with local emergency response providers; and • fire suppression and recovery procedures.

Measure	Measure Language
APM FIRE-02: O&M FPP	SDG&E's CNF O&M FPP will be implemented throughout the O&M phases of the Project that are located on CNF land. SDG&E's CNF O&M FPP includes the following at a minimum: • the purpose and applicability of the plan; • the permittee/permittee's agents required actions; and • procedures for fire reporting, response, and prevention that include the following: – the tools and equipment needed on vehicles and at sites; – identification of daily site-specific risk conditions; – daily monitoring of the Red Flag Warning system with appropriate restrictions on the types and levels of permissible activity; – general state regulations to verify fire prevention and safety; – PALs and other measures to reduce the risk of large, damaging wildfires; – federal and state laws governing vegetation management; – information on how to report a wildfire; and – mitigation techniques to implement while metal-cutting, welding, and grinding.

2.9 REFERENCES

APLIC. 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC and Sacramento, CA. Online. https://www.nrc.gov/docs/ML1224/ML12243A391.pdf. Site visited May 2025.

APLIC. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, DC. Online. https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Site visited May 2025.

CAISO. 2022. 2021-2022 Transmission Plan. Online. https://www.caiso.com/InitiativeDocuments/ISOBoardApproved-2021-2022TransmissionPlan.pdf. Site visited April 2025

CAISO. 2023. 2022-2023 Transmission Plan. Online. https://stakeholdercenter.caiso.com/RecurringStakeholderProcesses/2022-2023-Transmission-planning-process. Site visited April 2025.

CAL FIRE. 2025. Fire Hazard Severity Zones in State Responsibility Area. Online. https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Site visited April 2025.

Cal-IPC. 2012. Preventing the Spread of Invasive Plants: Best Management Practices For Transportation and Utility Corridors. Online. https://www.calipc.org/resources/library/publications/tuc/. Site visited November 2025.

California Legislative Information. 2025. Public Resources Code – PRC. Online. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=PRC&tocTitle=+Public+Resources+Code+-+PRC. Site visited April 2025.

CDFW. 2025. Conservation. Online. https://wildlife.ca.gov/Conservation. Site visited April 2025.

Code of Federal Regulations. 2025. Online. https://www.ecfr.gov/. Site visited April 2025.

County of San Diego. 2025. Permits. Online. https://www.sandiegocounty.gov/content/sdc/dpw/pfdlist.html. Site visited April 2025.

CPUC. 2006a. General Order No. 128. Online. https://docs.cpuc.ca.gov/published/GENERAL_ORDER/52591.htm. Site visited April 2025.

CPUC. 2006b. Opinion on Commission Policies Addressing Electromagnetic Fields Emanating from Regulated Utility Facilities. Online.

https://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/53181.htm. Site visited May 2025.

CPUC. 2019. Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/c/6442463239-ceqa-pre-filing-guidelines-pea-checklist-nov-2019.pdf. Site visited April 2025.

CPUC. 2020. General Order No. 95. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M338/K730/338730245.pdf. Site visited April 2025.

CPUC. 2025a. Fire-Threat Maps and Fire-Safety Rulemaking. Online. https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking. Site visited April 2025.

CPUC. 2025b. General Order No. 131-E. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/proceedings-and-rulemaking/documents/general-orders/go-131-e.pdf. Site visited April 2025.

FAA. 2025a. Obstruction Evaluation. Online. https://www.faa.gov/air_traffic/obstruction_evaluation. Site visited April 2025.

FAA. 2025b. Flight Standards District Offices. Online. https://www.faa.gov/about/office_org/field_offices/fsdo. Site visited April 2025.

IEEE. 2017. IEEE Guide for the Installation of Overhead Transmission Line Conductors.

National Oceanic and Atmospheric Administration National Marine Fisheries Service. 2025. ESA Section 7 Consultation on the West Coast. Online. https://www.fisheries.noaa.gov/west-coast/consultations/esa-section-7-consultations-west-coast. Site visited April 2025.

Office of Historic Preservation. 2025. Section 106 – Federal Agency Compliance. Online. https://ohp.parks.ca.gov/?page_id=1071. Site visited April 2025.

SDG&E. 2007a. Design and Procedure Manual for Transmission Line Access Roads.

SDG&E. 2007b. SDG&E Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly.

SDG&E. 2023a. 2023-2025 Wildfire Mitigation Plan. Online. https://www.sdge.com/2023-wildfire-mitigation-plan. Site visited April 2025.

SDG&E. 2023b. 2023 Electric Distribution Design Manual. Online. https://www.sdge.com/sites/default/files/regulatory/DM2023v0120e.pdf. Site visited April 2025.

SDG&E. 2023c. SDG&E Habitat Conservation Plan Amendment.

State Water Resources Control Board. 2025. Programs. Online. https://www.waterboards.ca.gov/water_issues/programs/. Site visited April 2025.

Thomson Reuters. 2025. California Code of Regulations. Online. https://govt.westlaw.com/calregs/Index?contextData=%28sc.Default%29&transitionType=Default. Site visited April 2025.

USACE. 2025. Regulatory Program and Permits. Online. https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/. Site visited April 2025.

USFWS. 2025. ESA Section 7 Consultation. Online. https://www.fws.gov/service/esa-section-7-consultation. Site visited April 2025.

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ATTACHMENT 2-A: DETAILED ROUTE MAP

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Attachment 2-A: Detailed Route Map

Map 1 of 67

Suncrest 230 Kilovolt Loop-In Project

- Existing Pole
- Proposed Conventional Pole
- Existing Transmission Line (TL) 23021
- Proposed 230 kV Western UG Segment

Permanent Component

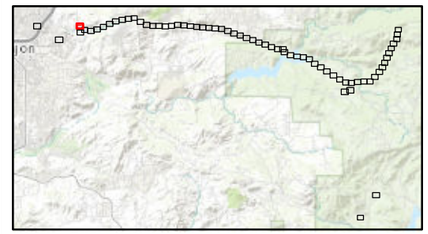
- Vault

Temporary Component

- Temporary Workspace
- Underground Trench

Landownership

- California Department of Fish and Wildlife



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Attachment 2-A: Detailed Route Map

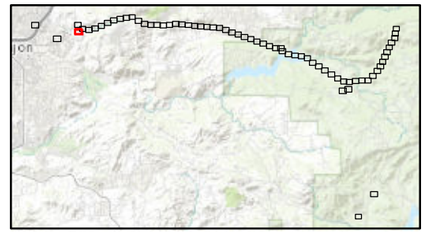
Map 2 of 67

Suncrest 230 Kilovolt Loop-In Project

- Existing Pole
- Existing Transmission Line (TL) 23021

Landownership

- Endangered Habitats Conservancy
- Private Conservation/Open Space Easement



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Attachment 2-A: Detailed Route Map

Map 3 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment

Permanent Component

Vault

Temporary Component

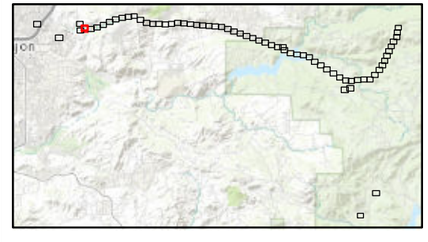
Underground Trench

Landownership

California Department of Fish and Wildlife

Endangered Habitats Conservancy

Private Conservation/Open Space Easement



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0 100 200 Feet

SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 4 of 67

Suncrest 230 Kilovolt Loop-In Project

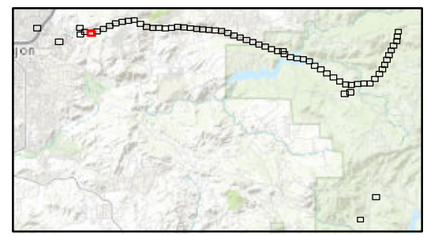
Proposed 230 kV Western UG Segment

Permanent Component

Vault

Temporary Component

Underground Trench



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 5 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment

Permanent Component

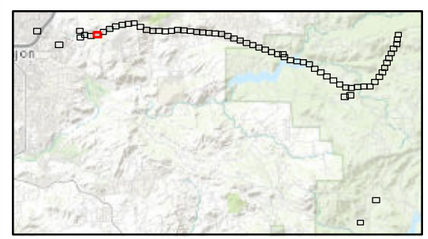
Vault

Temporary Component

Underground Trench

Landownership

California Department of Fish and Wildlife



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SDGE

Attachment 2-A: Detailed Route Map

Map 6 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment

Permanent Component

Vault

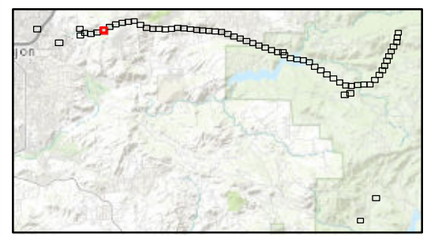
Temporary Component

Underground Trench

Landownership

California Department of Fish and Wildlife

Endangered Habitats Conservancy



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SDGE

Attachment 2-A: Detailed Route Map

Map 7 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment

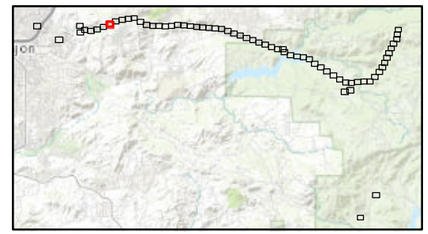
Temporary Component

Underground Trench

Landownership

California Department of Fish and Wildlife

Endangered Habitats Conservancy



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SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 8 of 67

Suncrest 230 Kilovolt Loop-In Project

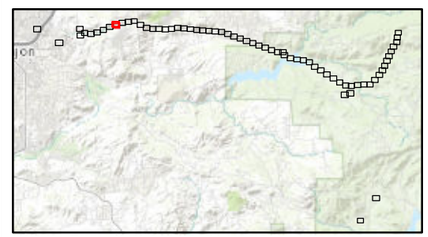
Proposed 230 kV Western UG Segment

Permanent Component

Vault

Temporary Component

Underground Trench



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SDGE

Attachment 2-A: Detailed Route Map

Map 9 of 67

Suncrest 230 Kilovolt Loop-In Project

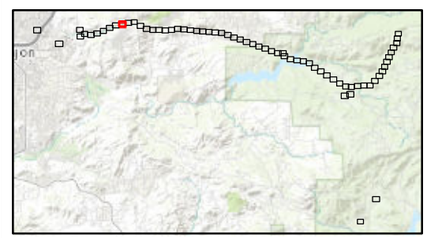
Proposed 230 kV Western UG Segment

Permanent Component

Vault

Temporary Component

Underground Trench



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

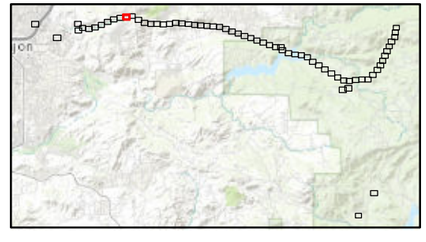
Map 10 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment

Temporary Component

Underground Trench



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 11 of 67

Suncrest 230 Kilovolt Loop-In Project

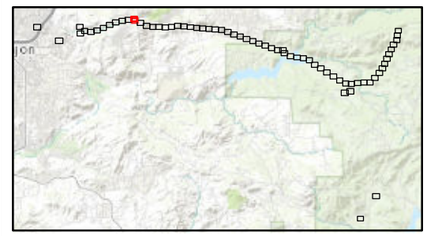
Proposed 230 kV Western UG Segment

Permanent Component

Vault

Temporary Component

Underground Trench



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0 100 200 Feet

SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 12 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment

Permanent Component

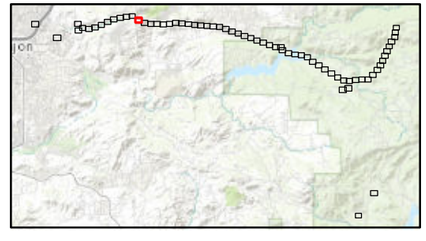
Vault

Temporary Component

Underground Trench

Landownership

Private Conservation/Open Space Easement



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 13 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment
- Overhead Easment (200 feet)

Permanent Component

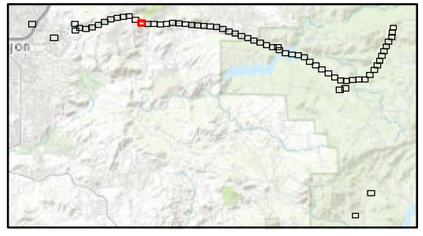
- Grading
- Pad/Access Road

Temporary Component

- Stringing Site
- Underground Trench

Landownership

- Private Conservation/Open Space Easement



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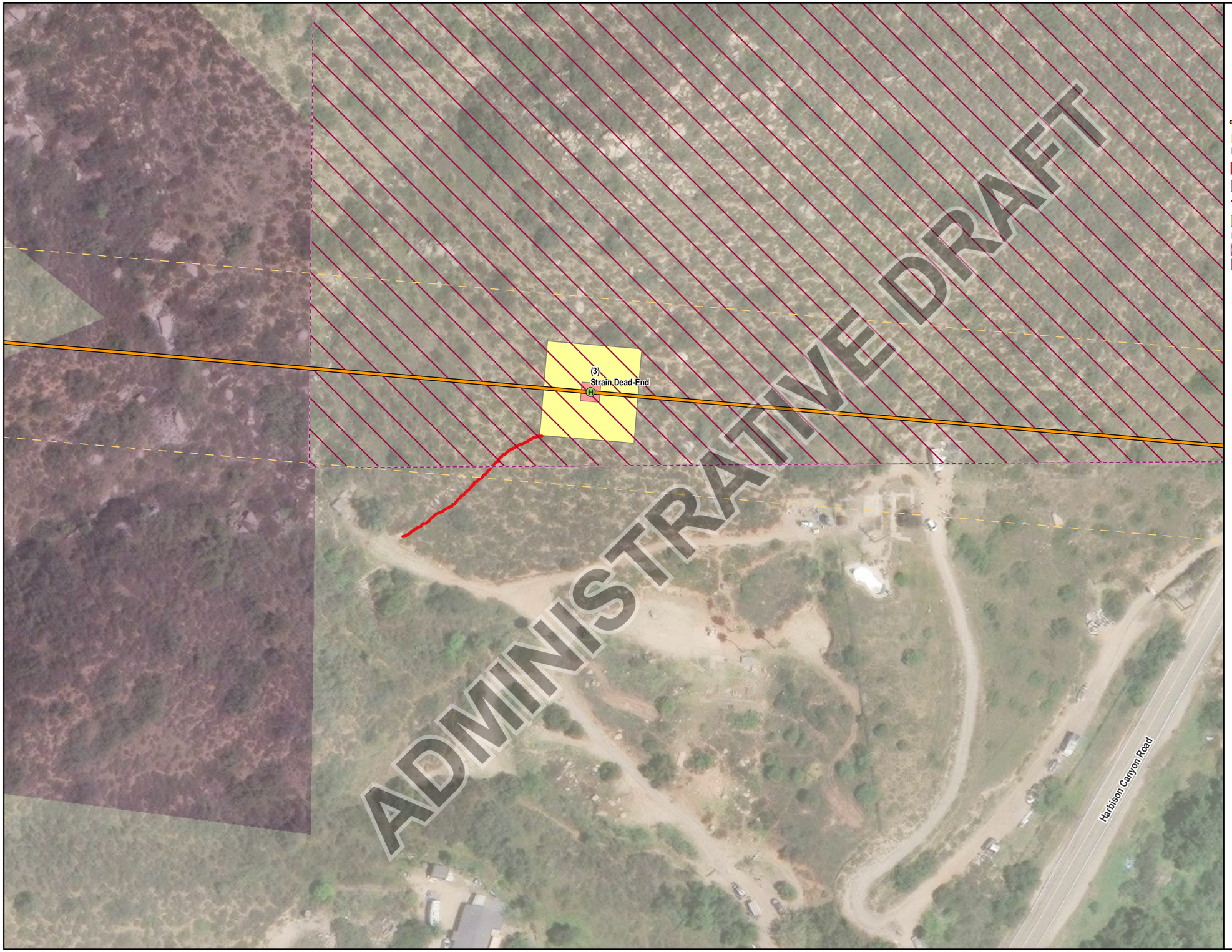
SDGE



Attachment 2-A: Detailed Route Map

Map 14 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

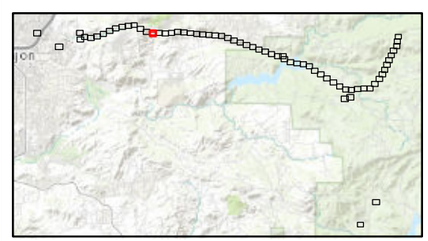
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Endangered Habitats Conservancy
- Private Conservation/Open Space Easement



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 15 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

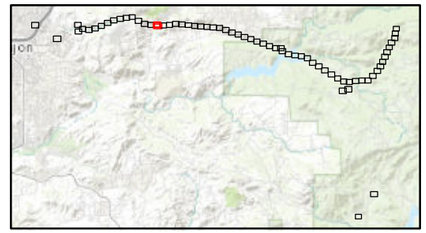
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- Endangered Habitats Conservancy



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 16 of 67

Suncrest 230 Kilovolt Loop-In Project

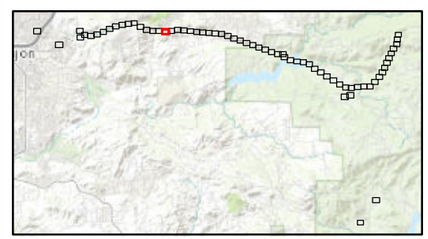
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 17 of 67

Suncrest 230 Kilovolt Loop-In Project

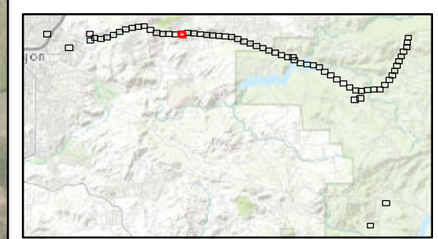
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 18 of 67

Suncrest 230 Kilovolt Loop-In Project

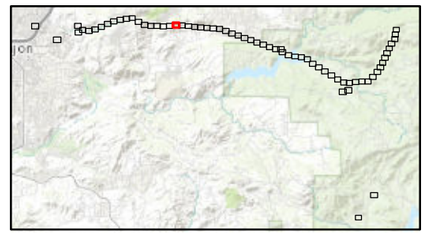
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 19 of 67

Suncrest 230 Kilovolt Loop-In Project

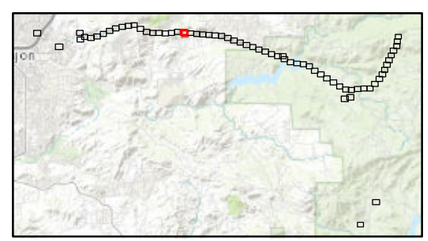
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



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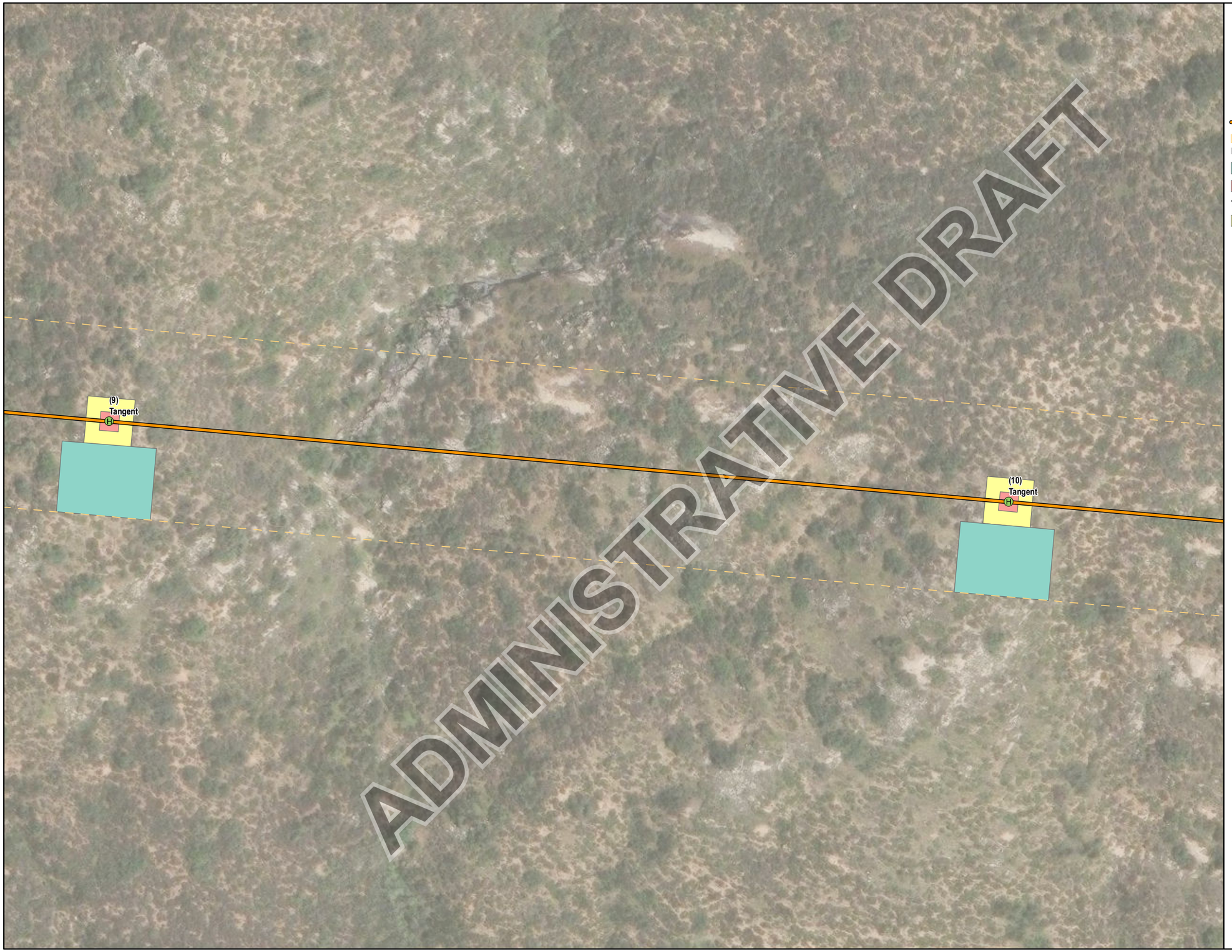
SDGE



Attachment 2-A: Detailed Route Map

Map 20 of 67

Suncrest 230 Kilovolt Loop-In Project

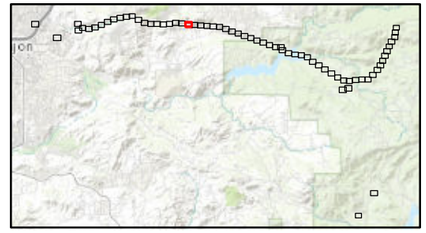
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



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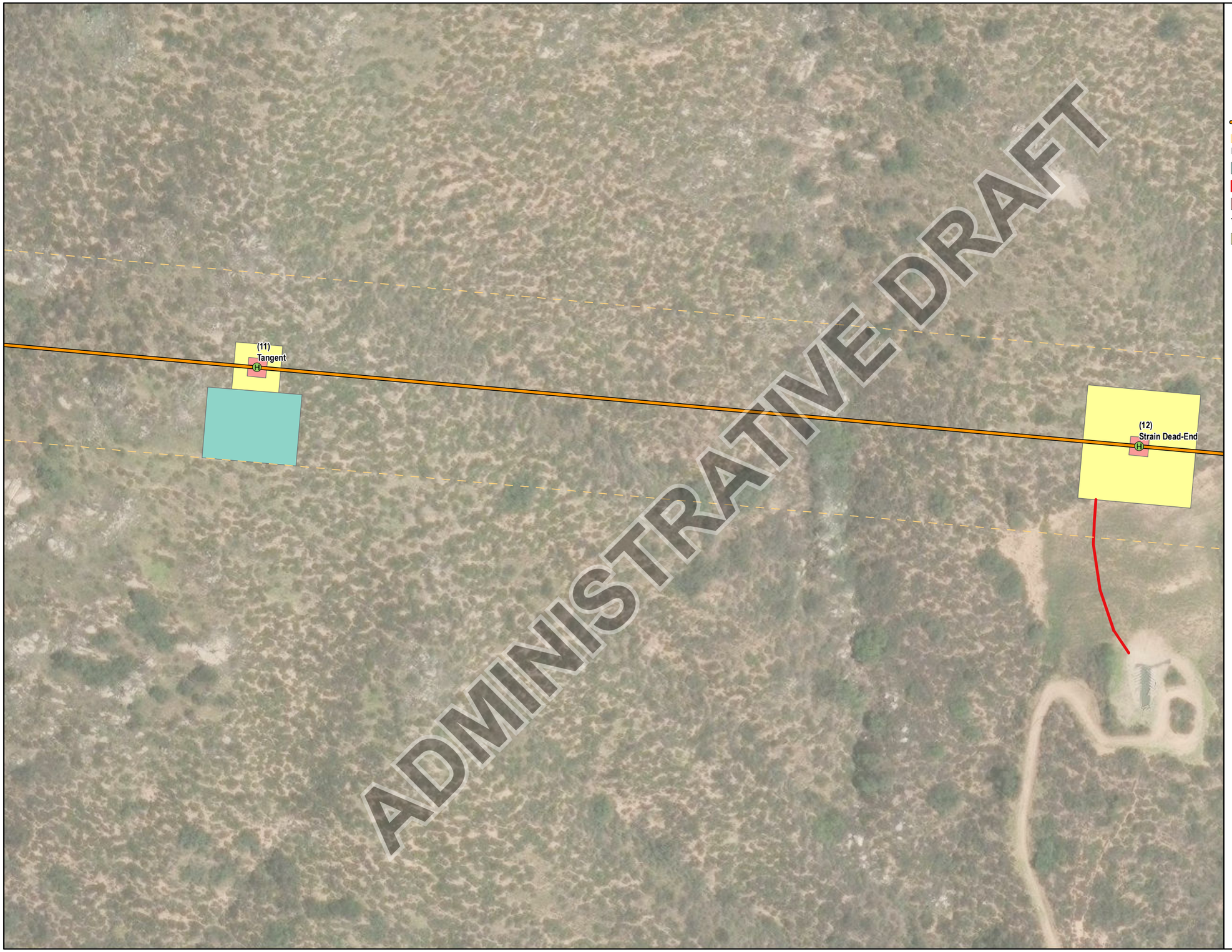


Attachment 2-A: Detailed Route Map

Map 21 of 67

Suncrest 230 Kilovolt Loop-In Project

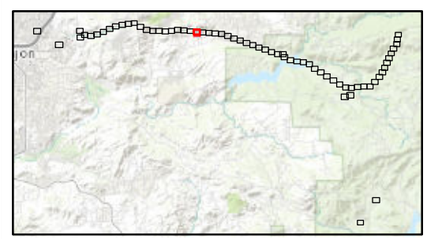
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 22 of 67

Suncrest 230 Kilovolt Loop-In Project

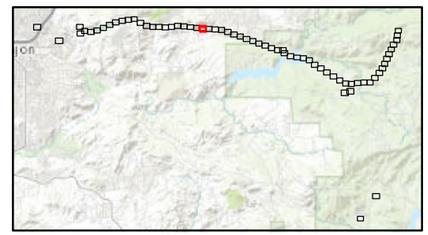
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 23 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

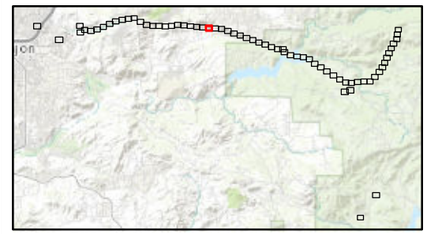
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Private Conservation/Open Space Easement



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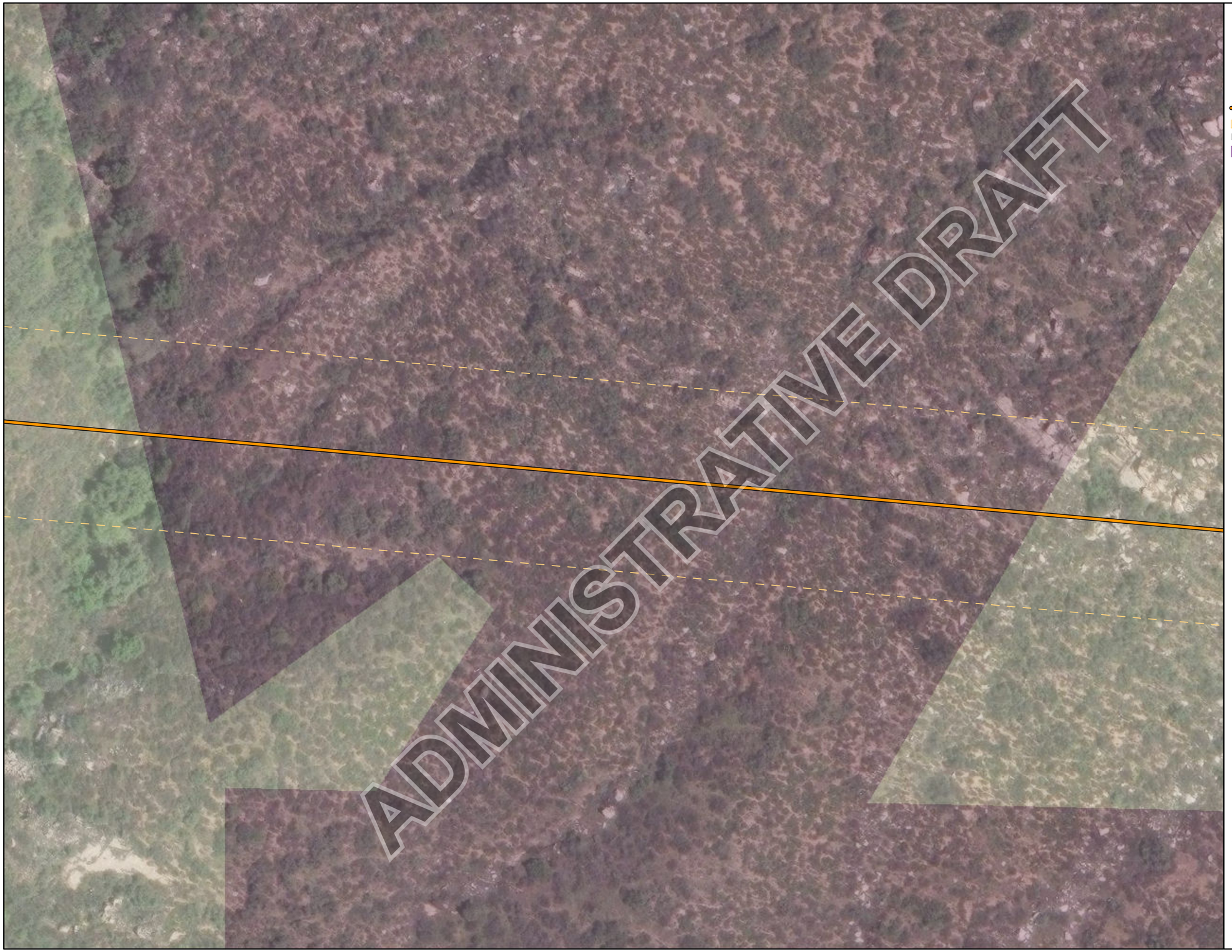
SDGE



Attachment 2-A: Detailed Route Map

Map 24 of 67

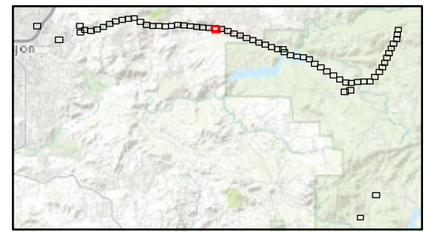
Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

Overhead Easment (200 feet)

Landownership

Private Conservation/Open Space Easement



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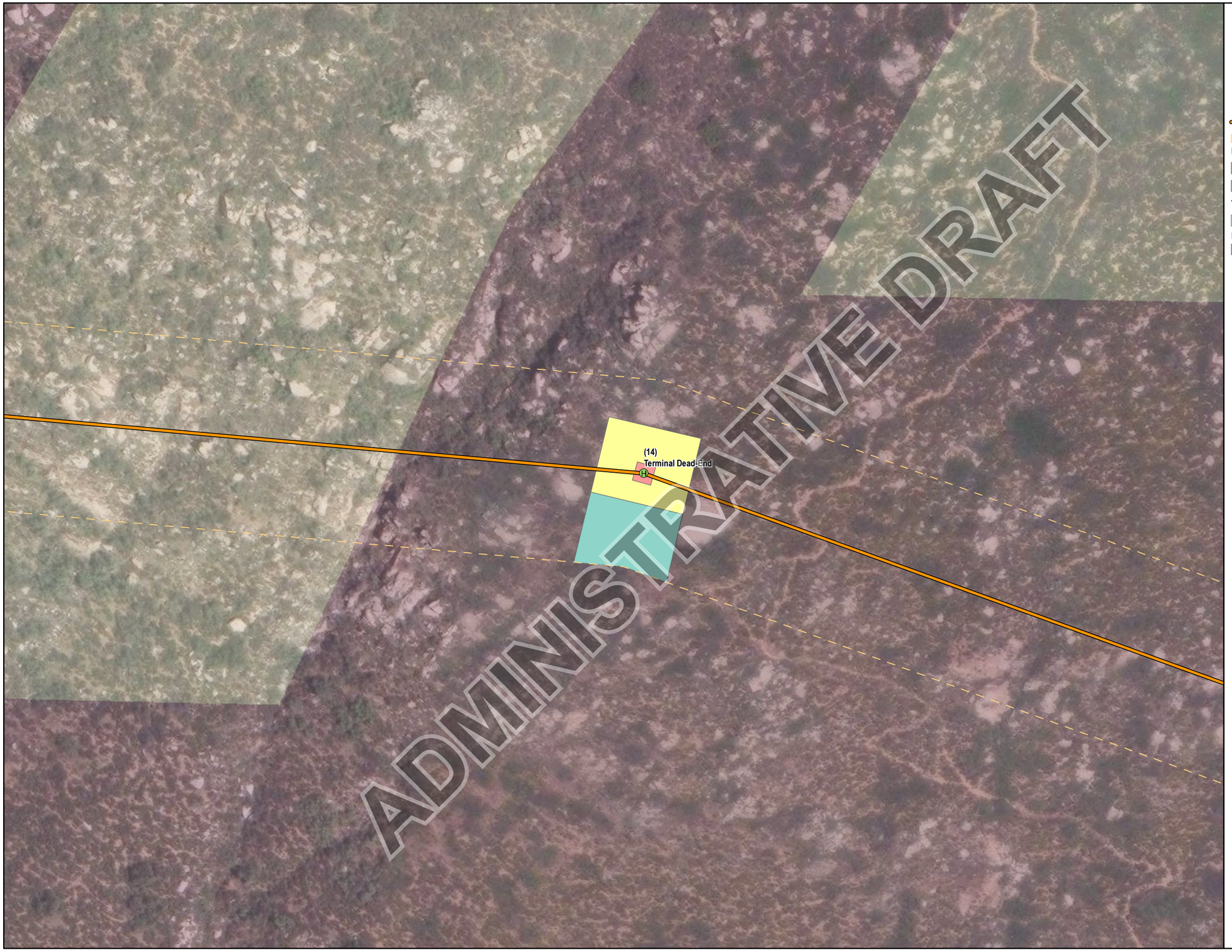
0 100 200 Feet

SDGE



Attachment 2-A: Detailed Route Map

Map 25 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

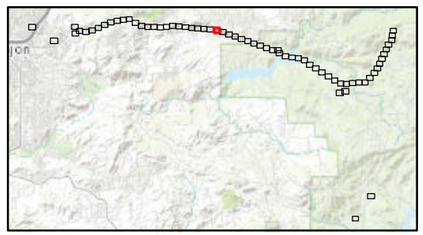
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Private Conservation/Open Space Easement



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 26 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

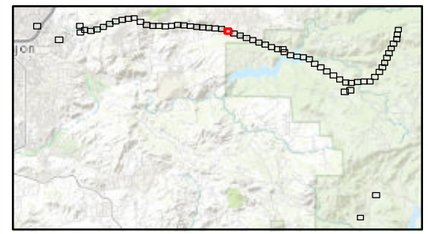
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Private Conservation/Open Space Easement



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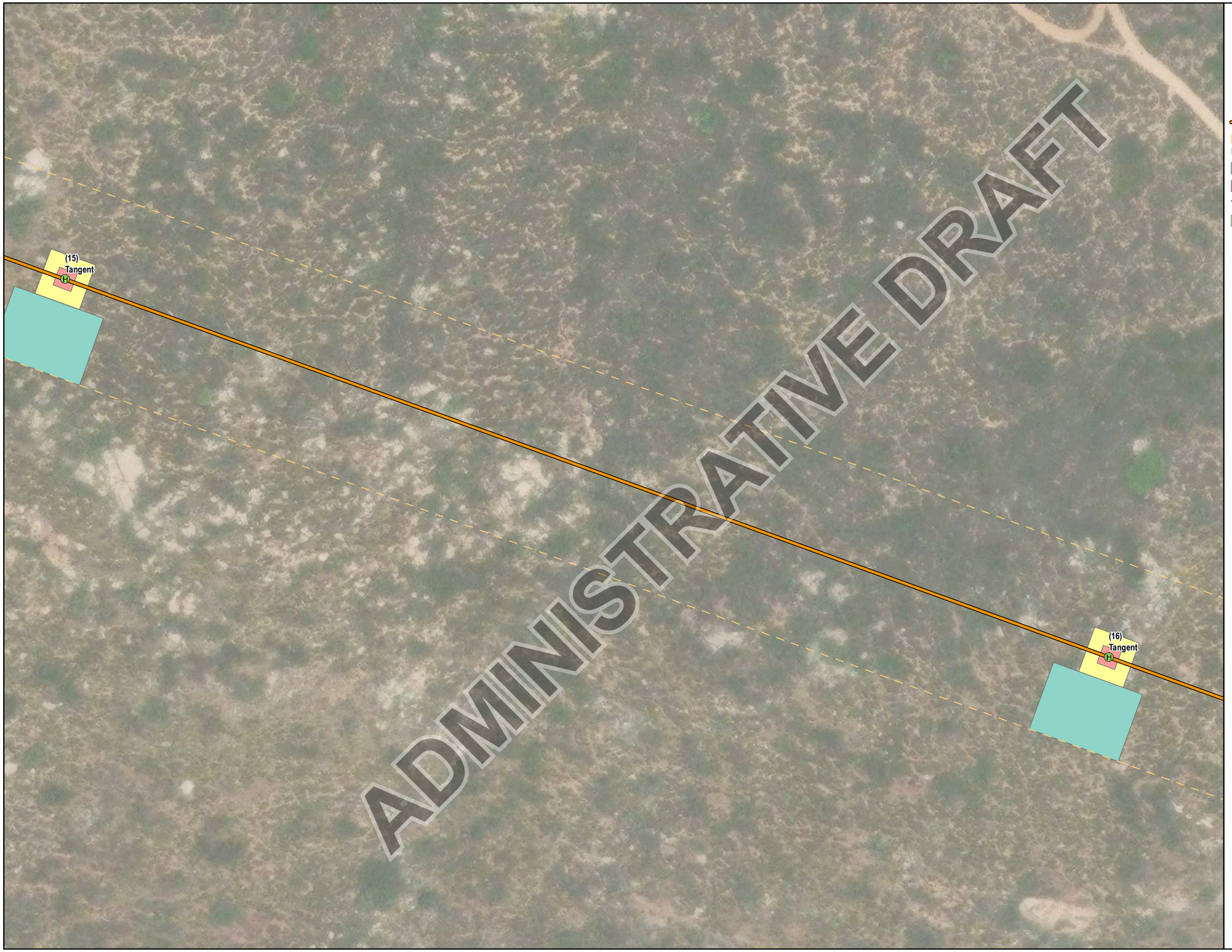
SDGE



Attachment 2-A: Detailed Route Map

Map 27 of 67

Suncrest 230 Kilovolt Loop-In Project

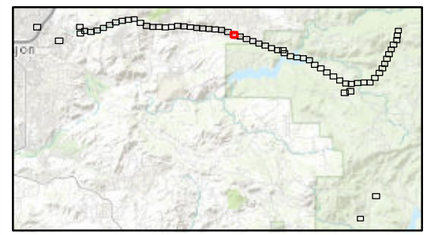
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 28 of 67

Suncrest 230 Kilovolt Loop-In Project

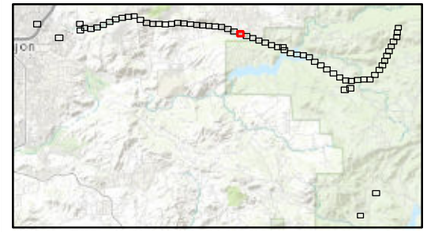
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 29 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

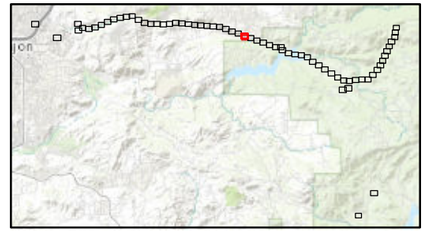
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- Private Conservation/Open Space Easement



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 30 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

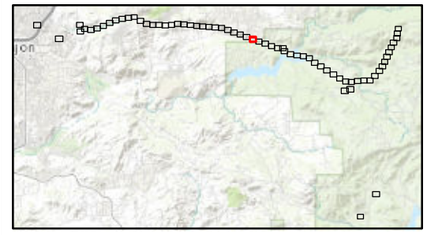
- New Footpath
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- Private Conservation/Open Space Easement



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 31 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

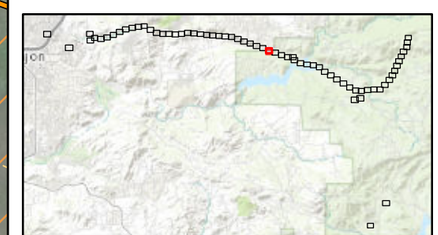
- Drainage Swale
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- Sweetwater Authority
- Private Conservation/Open Space Easement



1:1,200

0 100 200 Feet

SDGE

Japatul Road

Via Asoleado

(22)
Tangent

Sequan Truck Trail

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 32 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

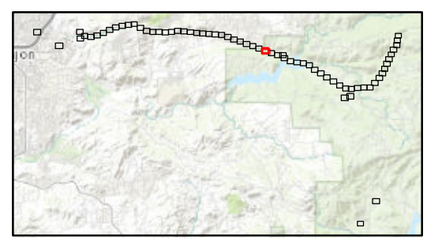
- Grading
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- Sweetwater Authority
- Private Conservation/Open Space Easement



1:1,200

0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 33 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

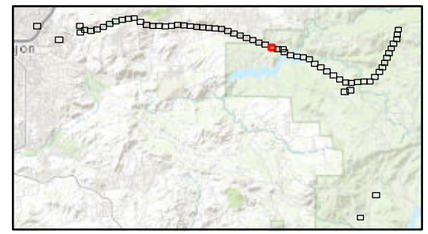
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Sweetwater Authority



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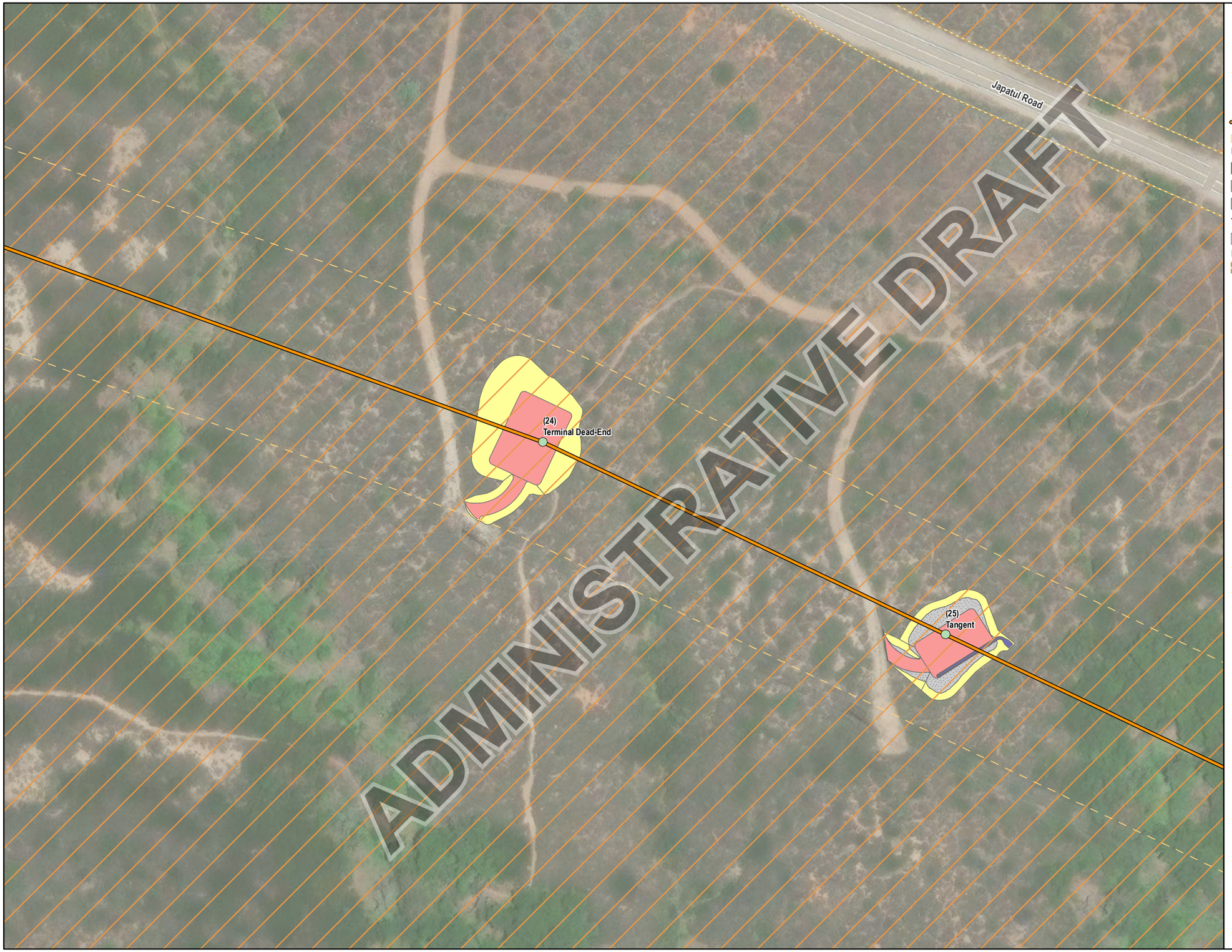


Attachment 2-A: Detailed Route Map

Map 34 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

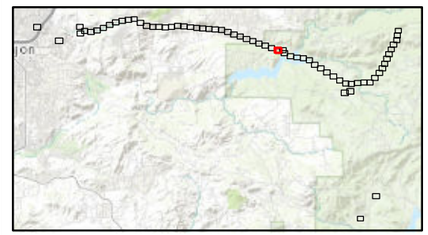
- Drainage Swale
- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Sweetwater Authority



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SDGE

Attachment 2-A: Detailed Route Map

Map 35 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

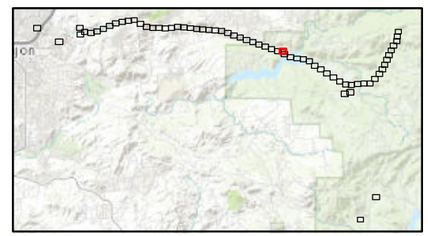
- Drainage Swale
- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace
- Staging Yard/Fly Yard

Landownership

- Sweetwater Authority



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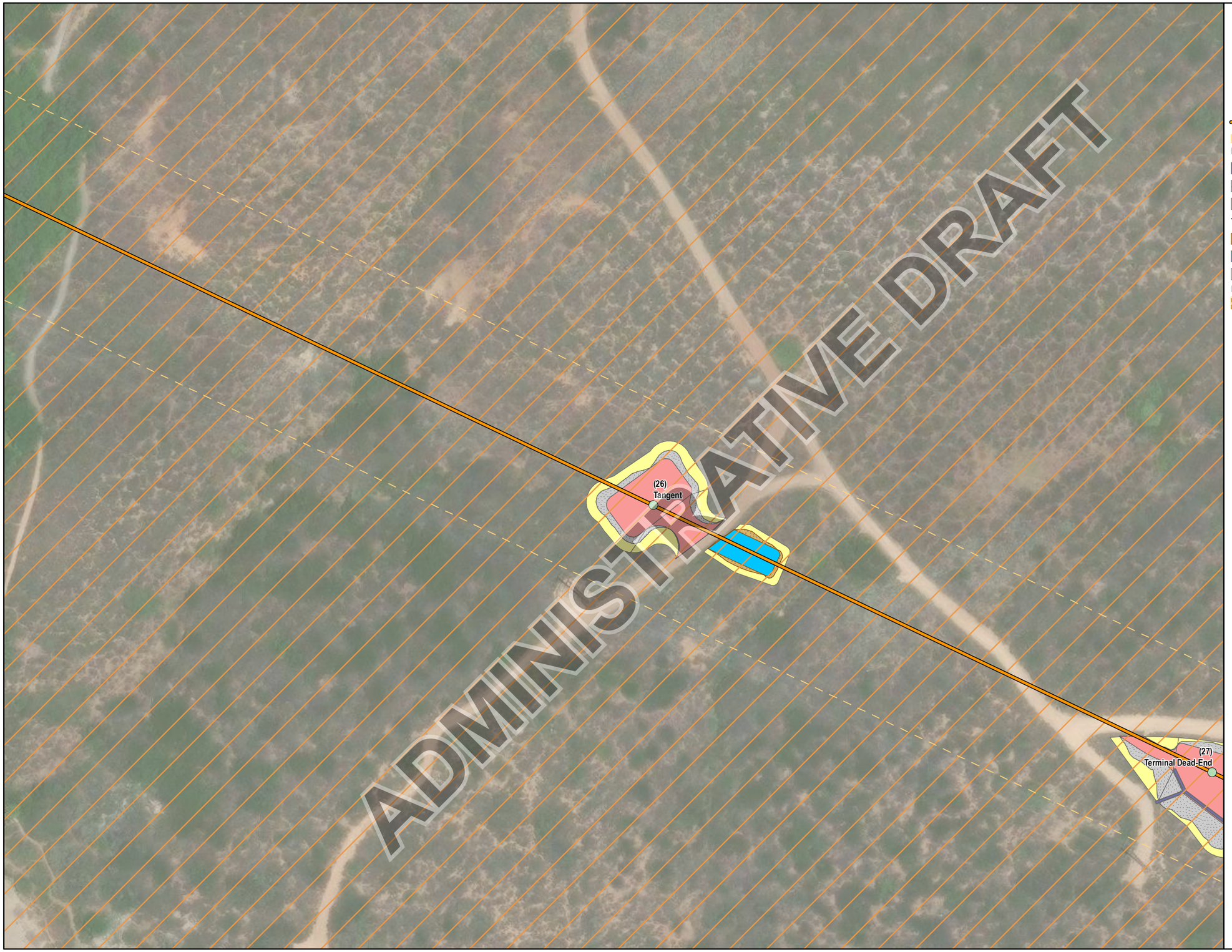


Attachment 2-A: Detailed Route Map

Map 36 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

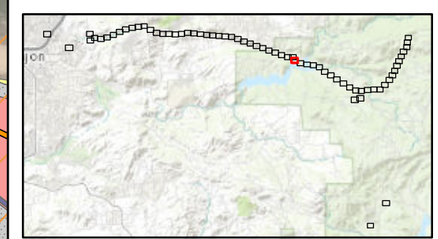
- Drainage Swale
- Grading
- Pad/Access Road

Temporary Component

- Grading
- Stringing Site
- Temporary Workspace

Landownership

- Sweetwater Authority



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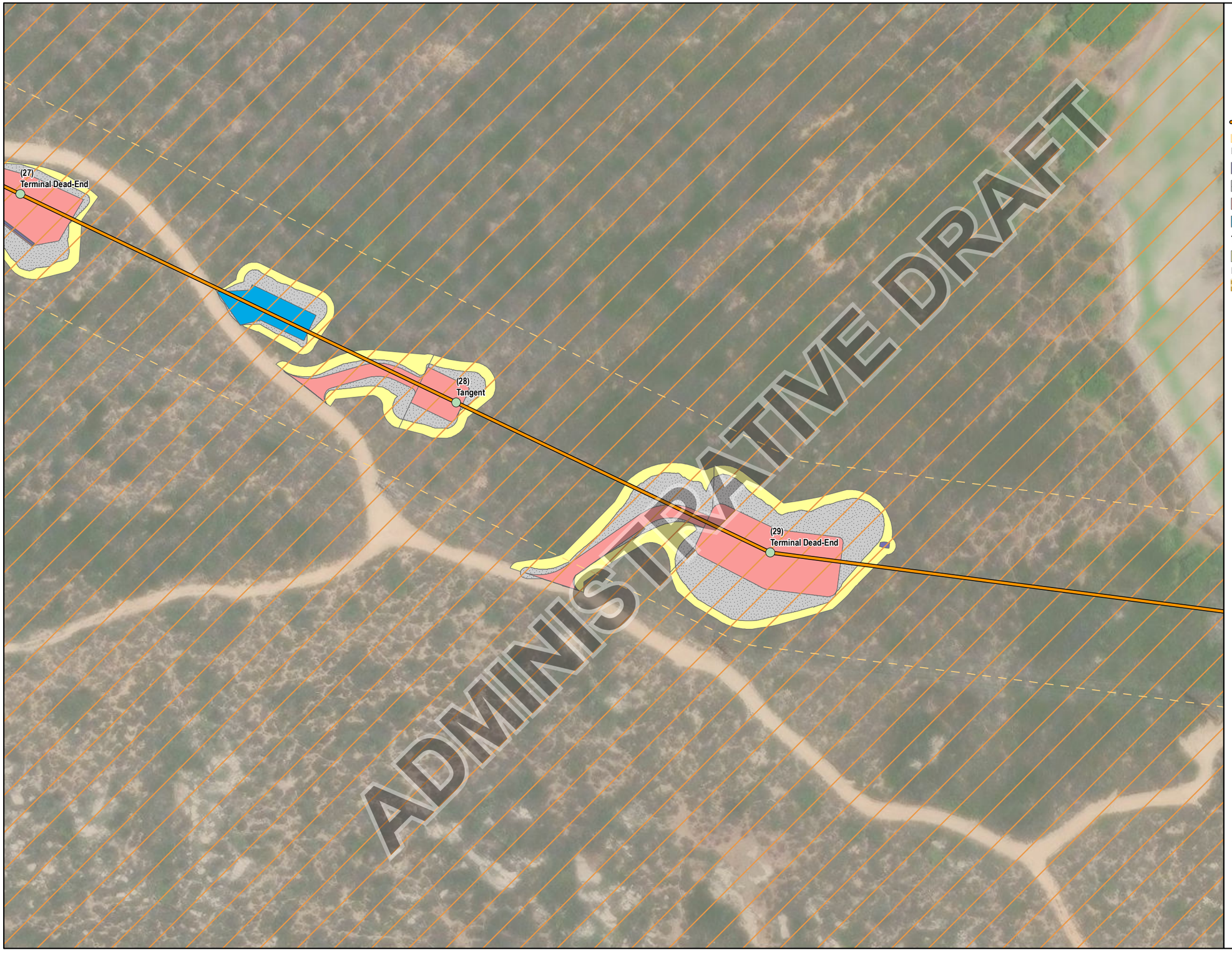


Attachment 2-A: Detailed Route Map

Map 37 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

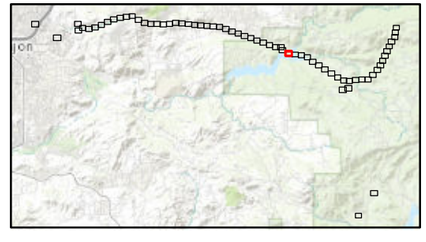
- Drainage Swale
- Grading
- Pad/Access Road
- Stringing Site

Temporary Component

- Temporary Workspace

Landownership

- Sweetwater Authority



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SDGE

Attachment 2-A: Detailed Route Map

Map 38 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

Overhead Easment (200 feet)

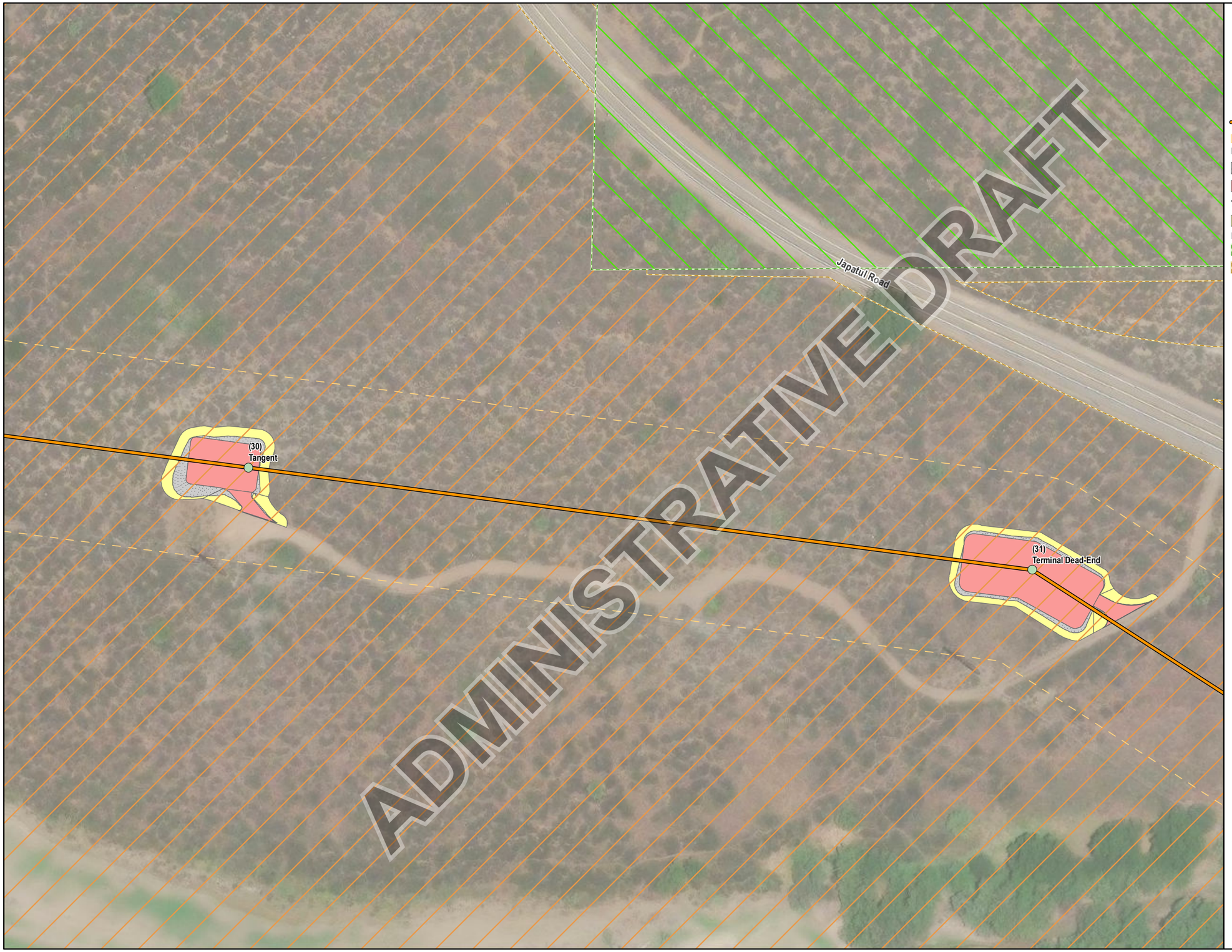
Landownership

Sweetwater Authority

1:1,200

0 100 200 Feet

SDGE



Attachment 2-A: Detailed Route Map

Map 39 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace

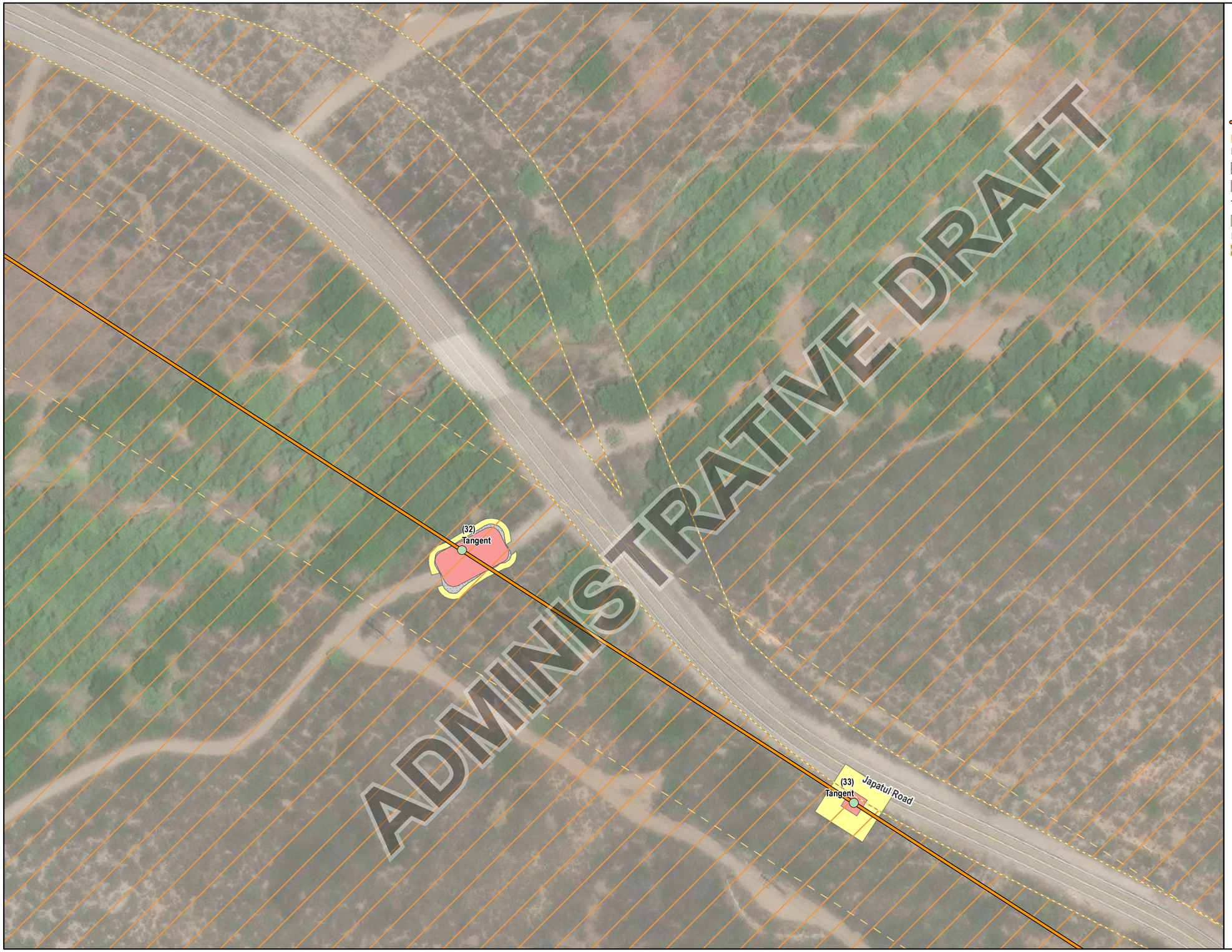
Landownership

- United States Forest Service
- Sweetwater Authority

1:1,200

0 100 200 Feet

SDGE



ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 40 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

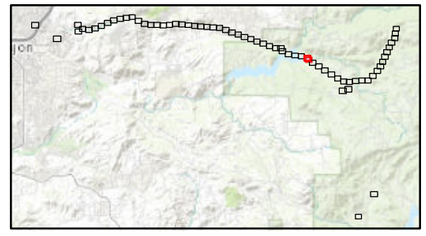
- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Sweetwater Authority



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SDGE

Attachment 2-A: Detailed Route Map

Map 41 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

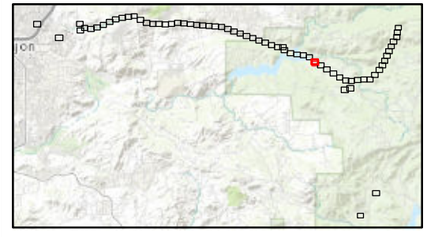
- Grading
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- Sweetwater Authority
- Private Conservation/Open Space Easement



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SDGE

Attachment 2-A: Detailed Route Map

Map 42 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

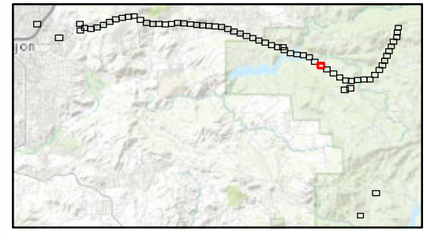
- Helicopter Landing
- Pad/Access Road
- RipRap

Temporary Component

- Temporary Workspace

Landownership

- Sweetwater Authority
- Private Conservation/Open Space Easement



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SDGE

Attachment 2-A: Detailed Route Map

Map 43 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

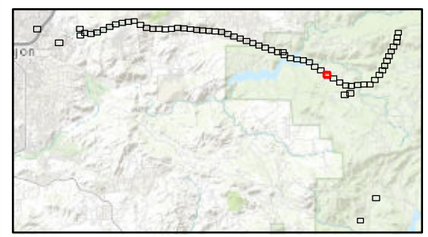
- Drainage Swale
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- Private Conservation/Open Space Easement



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SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 44 of 67

Suncrest 230 Kilovolt Loop-In Project

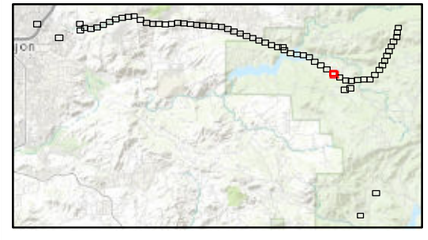
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

- Pad/Access Road

Temporary Component

- Temporary Workspace



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SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 45 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

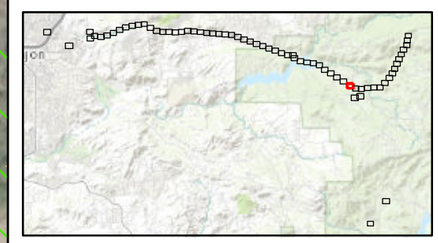
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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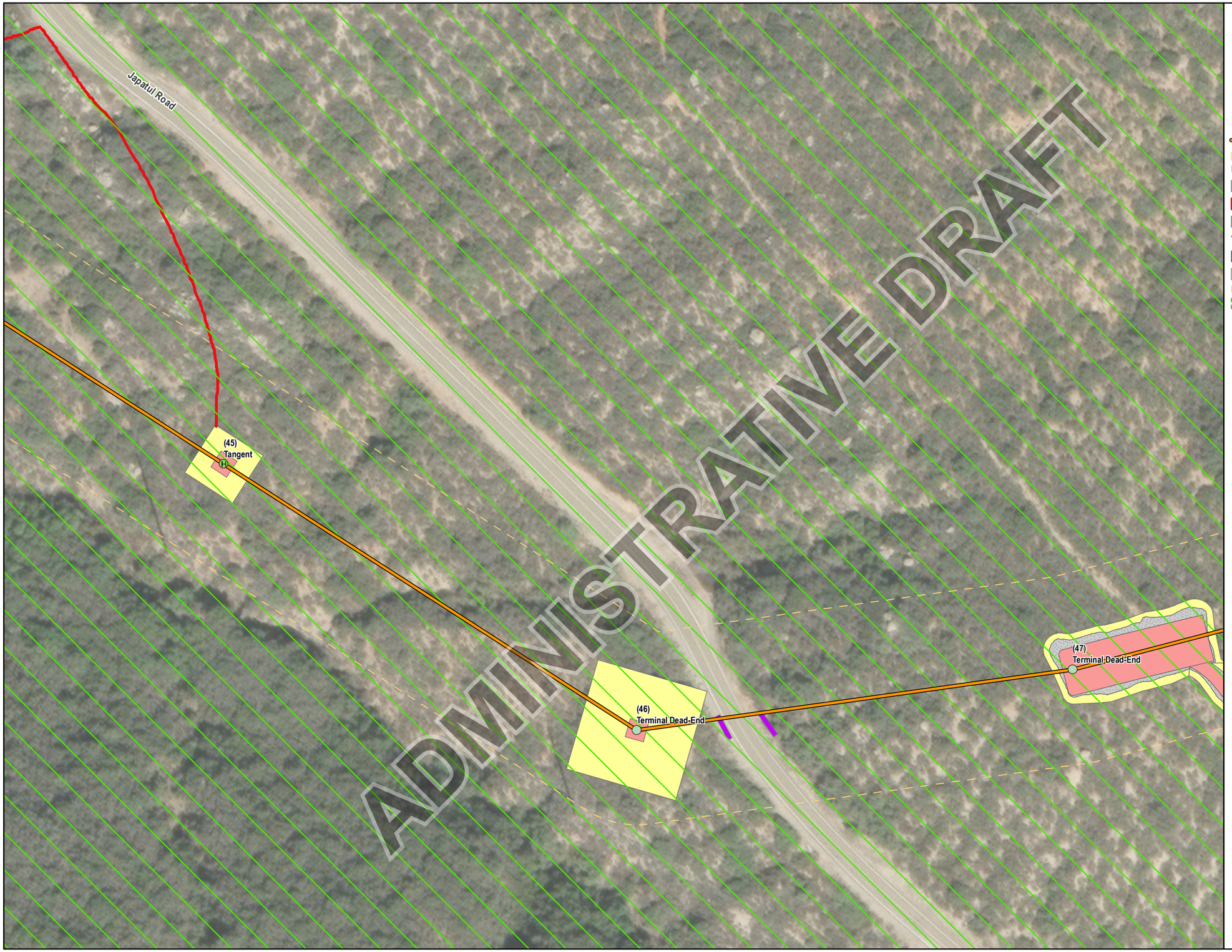


Attachment 2-A: Detailed Route Map

Map 46 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

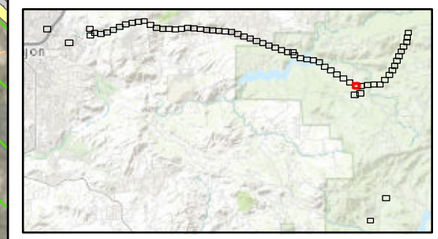
- Grading
- New Footpath
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace

Landownership

- United States Forest Service



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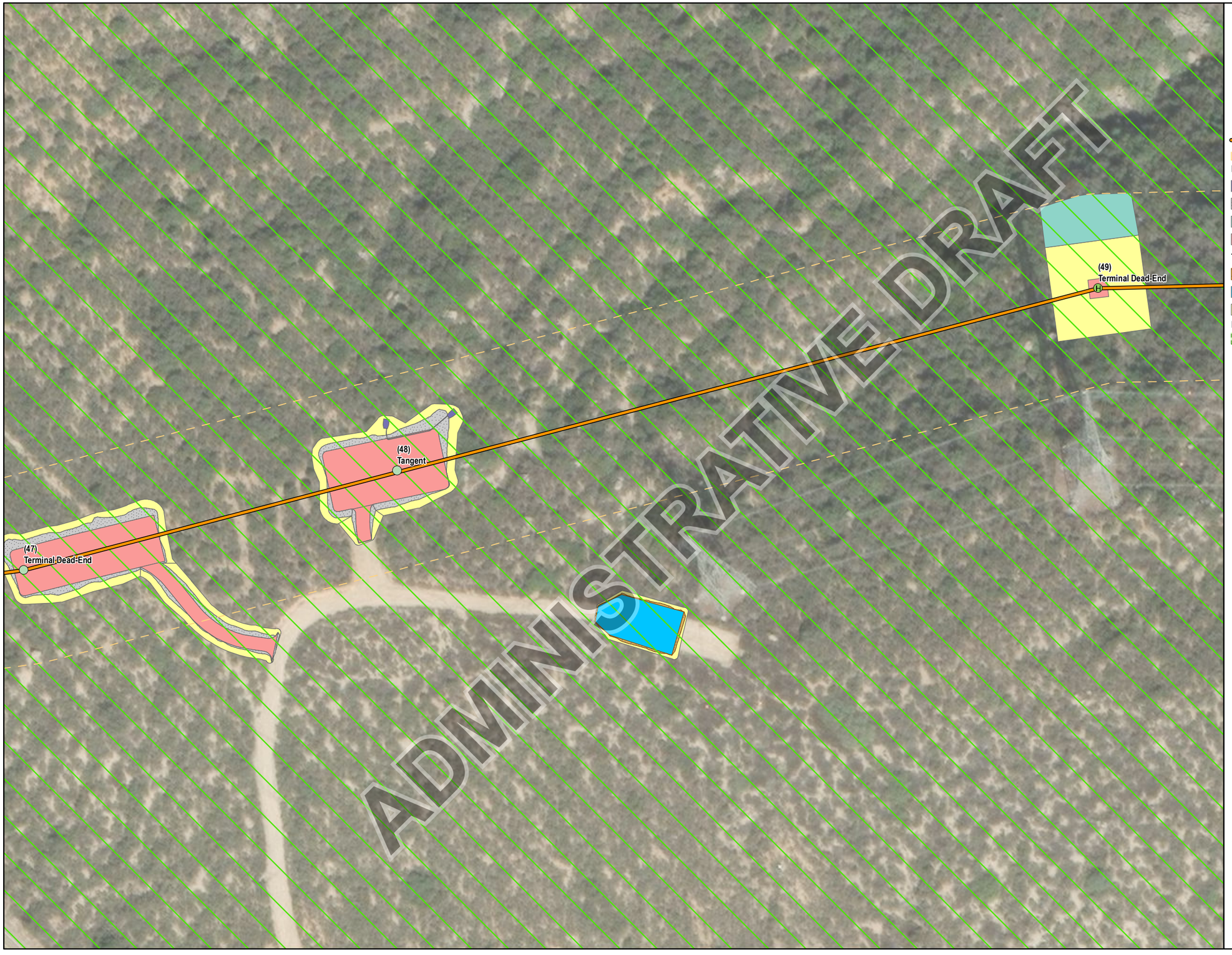


Attachment 2-A: Detailed Route Map

Map 47 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

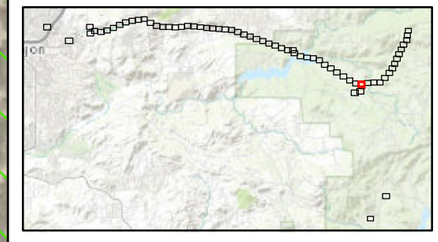
- Drainage Swale
- Grading
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Grading
- Stringing Site
- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 48 of 67

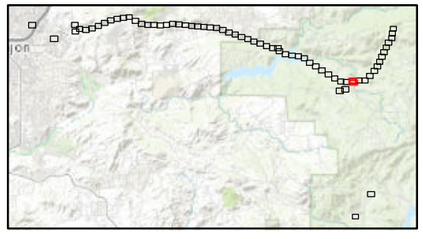
Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

Overhead Easment (200 feet)

Landownership

United States Forest Service



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 49 of 67

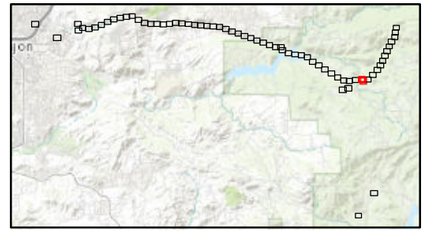
Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

Overhead Easment (200 feet)

Landownership

United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 50 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

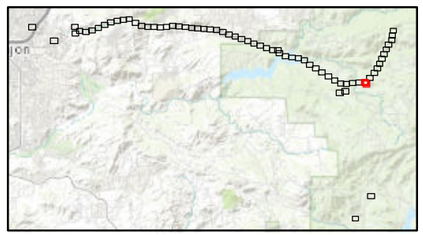
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 51 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

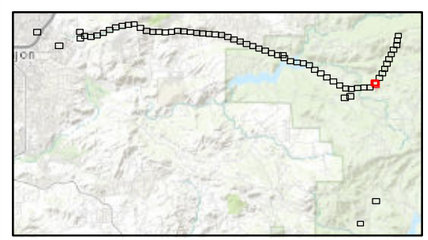
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 52 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

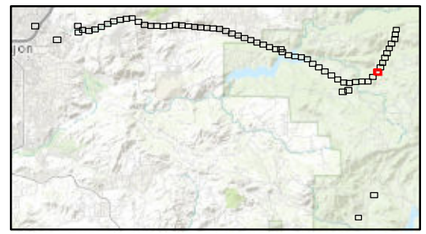
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 53 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

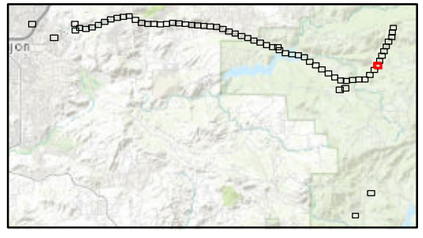
Overhead Easment (200 feet)

Permanent Component

Helicopter Landing

Landownership

United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 54 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

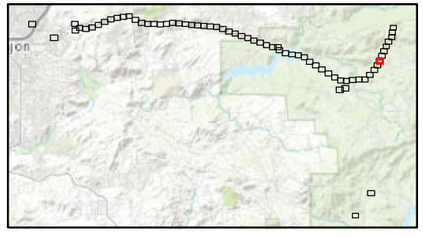
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 55 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

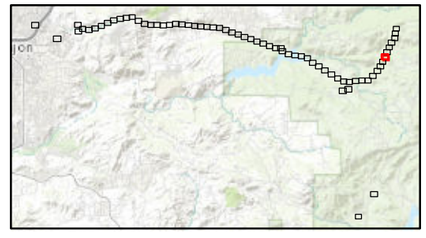
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 56 of 67

Suncrest 230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

Overhead Easment (200 feet)

Permanent Component

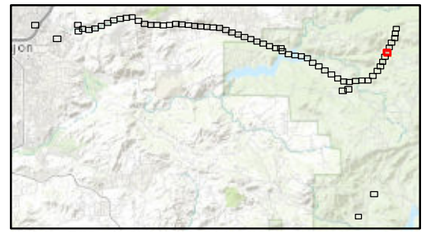
Helicopter Landing

Temporary Component

Temporary Workspace

Landownership

United States Forest Service



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0 100 200 Feet

SDGE

Attachment 2-A: Detailed Route Map

Map 57 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

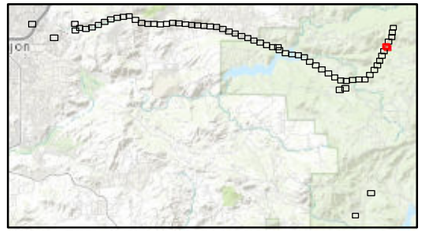
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

Attachment 2-A: Detailed Route Map

Map 58 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Helicopter Pole
- Proposed 230 kV OH Segment
- Overhead Easment (200 feet)

Permanent Component

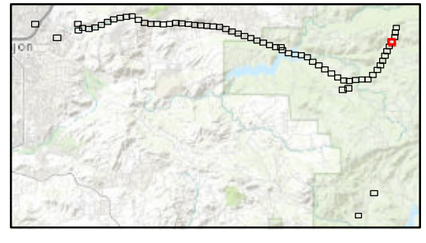
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Landownership

- United States Forest Service



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SDGE

ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 59 of 67

Suncrest 230 Kilovolt Loop-In Project

- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Overhead Easment (200 feet)

Permanent Component

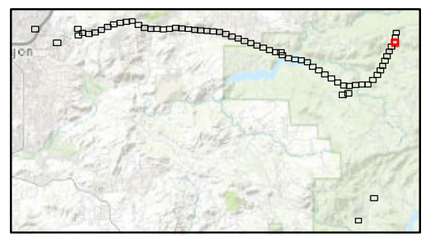
- Grading
- Pad/Access Road
- Vault

Temporary Component

- Temporary Workspace
- Underground Trench

Landownership

- United States Forest Service



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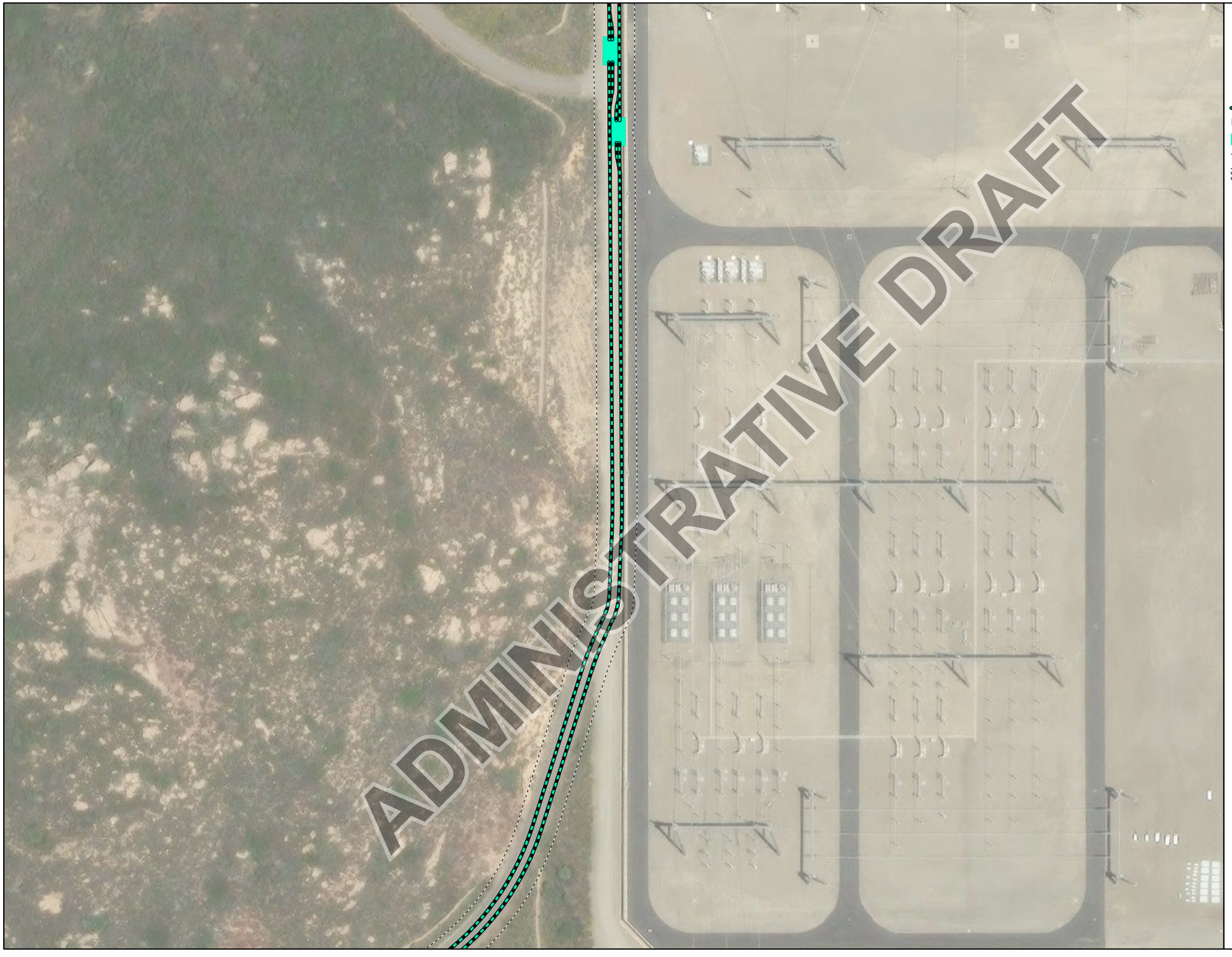


Attachment 2-A: Detailed Route Map

Map 60 of 67

Suncrest 230 Kilovolt Loop-In Project

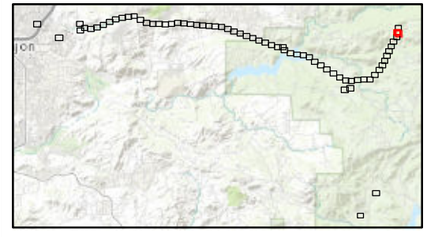
Proposed 230 kV Eastern UG Segment

Permanent Component

Vault

Temporary Component

Underground Trench



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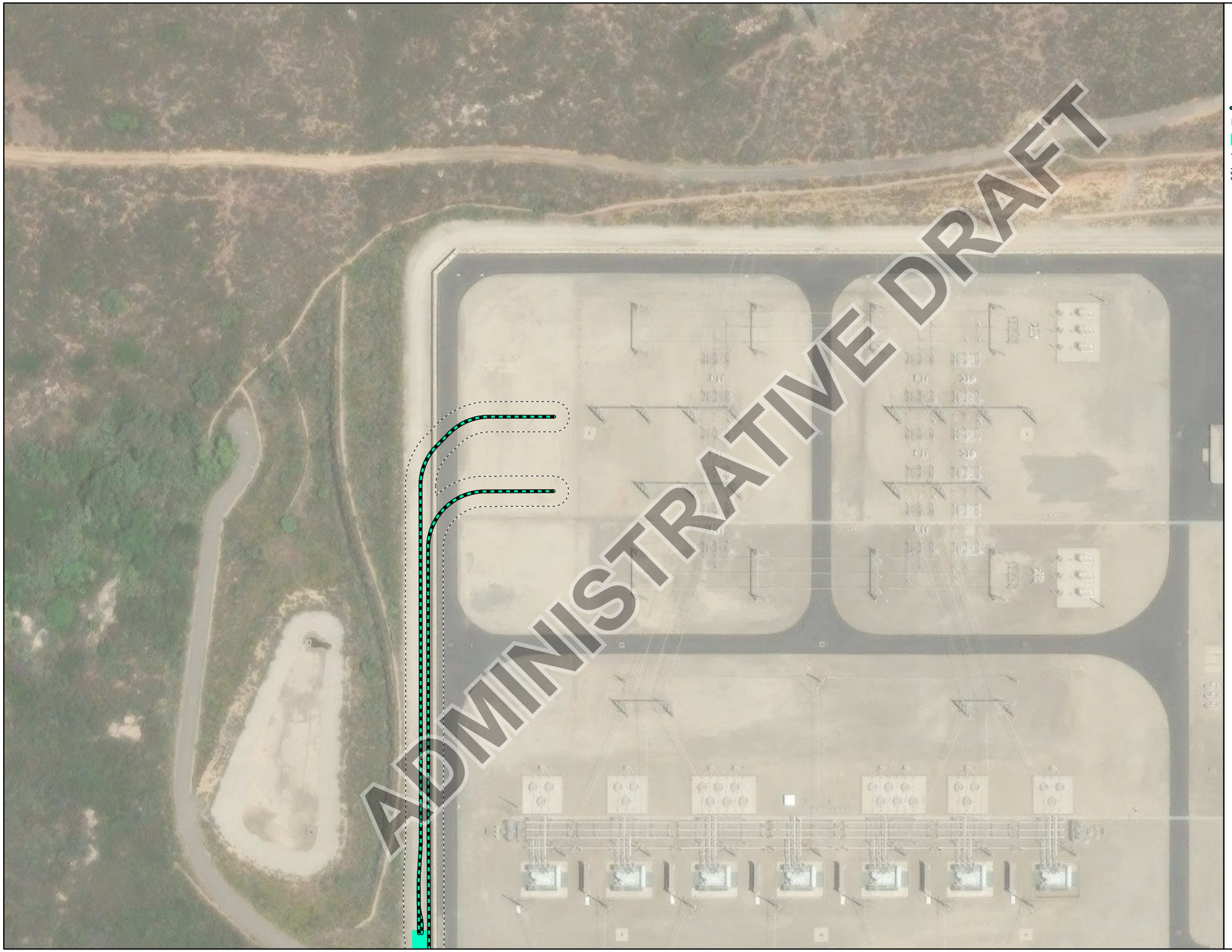


ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 61 of 67

Suncrest 230 Kilovolt Loop-In Project

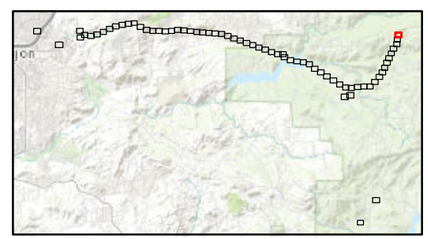
Proposed 230 kV Eastern UG Segment

Permanent Component

Vault

Temporary Component

Underground Trench



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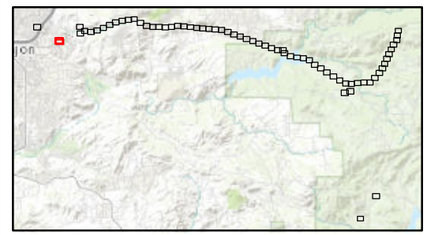
Attachment 2-A: Detailed Route Map

Map 62 of 67

Suncrest 230 Kilovolt Loop-In Project

Temporary Component

Staging Yard



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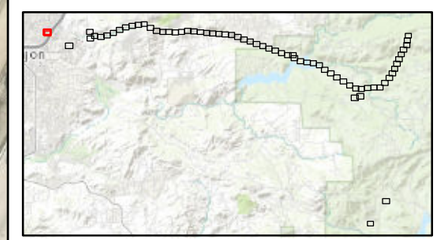
Attachment 2-A: Detailed Route Map

Map 63 of 67

Suncrest 230 Kilovolt Loop-In Project

Temporary Component

Staging Yard



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Attachment 2-A: Detailed Route Map

Map 64 of 67

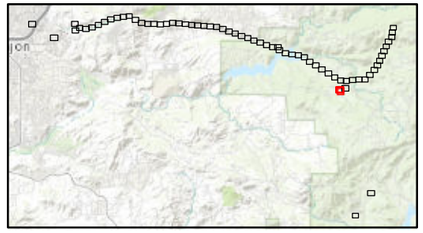
Suncrest 230 Kilovolt Loop-In Project

Temporary Component

Staging Yard

Landownership

United States Forest Service



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Attachment 2-A: Detailed Route Map

Map 65 of 67

Suncrest 230 Kilovolt Loop-In Project

Temporary Component

Fly Yard

Staging Yard

Landownership

United States Forest Service

Hidden Glen Road

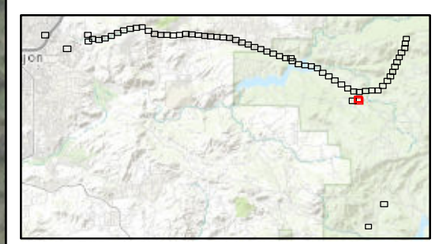
High Glen Road

Japatul Road

High Glen Staging Yard

High Glen Fly Yard

ADMINISTRATIVE DRAFT



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ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 66 of 67

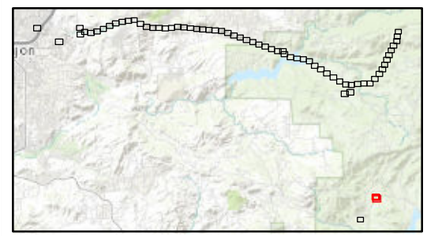
Suncrest 230 Kilovolt Loop-In Project

Temporary Component

Staging Yard

Landownership

City of San Diego



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ADMINISTRATIVE DRAFT

Attachment 2-A: Detailed Route Map

Map 67 of 67

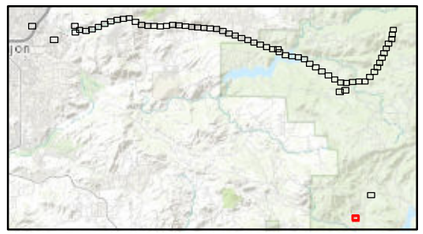
Suncrest 230 Kilovolt Loop-In Project

Temporary Component

Staging Yard/Fly Yard

Landownership

City of San Diego



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ATTACHMENT 2-B: PROPOSED CONSTRUCTION EQUIPMENT AND WORKFORCE

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ATTACHMENT 2-B: PROPOSED CONSTRUCTION EQUIPMENT AND WORKFORCE

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
Survey and Staking (08/01/2027 through 02/01/2031) - 2 Crew Members)				
Pickup – 1/2 Ton	395	Gas	2	8
Utility Locate (08/01/2027 through 02/01/2031) - 5 Crew Members)				
Air Compressor 340/390hp	390	Diesel	1	8
Backhoe	150	Diesel	2	6
Flatbed truck	350	Diesel	2	10
Pickup - 1 Ton	410	Diesel	2	10
Mobilization (11/01/2027 through 12/31/2031) – 13 Crew Members)				
Backhoe	150	Diesel	2	6
Boom truck	150	Diesel	1	3
Flatbed truck	350	Diesel	1	10
Forklift	100	Diesel	2	8
Gang truck	350	Diesel	2	8
Generator 150-260 kW	260	Diesel	1	10
Light plant	10	Diesel	4	2
Pickup - 1 Ton	410	Diesel	4	2
Flatbed Truck	350	Diesel	2	3
Water holding tanks	0	Diesel	2	10
Water truck	300	Diesel	2	10
Access Road Construction (01/02/2028 through 08/31/2028) – 14 Crew Members)				
Pickup - 1/2 ton	395	Gasoline	2	2
Pickup - 1 ton	410	Diesel	4	2
Motor Grader	250	Diesel	2	6
Dump Truck	415	Diesel	3	10
Skid steer loader	74	Diesel	1	4
Water Truck	300	Diesel	2	6
D6 Type Dozer	250	Diesel	1	6
Excavator	250	Diesel	2	4
Vibratory Roller	125	Diesel	1	4

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
Bulldozer	250	Diesel	1	6
Road Grader	250	Diesel	1	6
Loader	230	Diesel	1	2
Mower	48	Diesel	1	3
Proposed 230 kV Overhead (OH) Segment – Conventional Structure Foundation Installation (02/02/2028 through 02/02/2029) – 20 Crew Members)				
Compressor	24	Diesel	1	6
Boom truck	150	Diesel	1	3
Pressure Digger - Lo-Drill (Tracked)	275	Diesel	1	8
Concrete Truck	425	Diesel	4	5
Pickup - 1 Ton	410	Diesel	4	2
Water Truck	300	Diesel	2	6
Dump Truck	415	Diesel	3	10
Skid steer loader	74	Diesel	1	6
Forklift - 10 K Reach	130	Diesel	2	2
Crane - 35 Ton (Manlift)	250	Diesel	2	5
844 Loader	417	Diesel	1	6
Rough Terrain Crane	185	Diesel	1	6
Proposed 230 kV OH Segment – Conventional Structure Installation (04/02/2028 through 02/02/2029) – 16 Crew Members)				
Crane – 35 Ton (Manlift)	250	Diesel	2	2
Pickup – ½ Ton	395	Gasoline	4	2
Forklift – 15 K Reach	130	Diesel	1	1
Pickup – 1 Ton	410	Diesel	4	2
Crane – 200 Ton	275	Diesel	1	4
844 Loader	417	Diesel	1	6
Water Truck	300	Diesel	2	6
Proposed 230 kV OH Segment – Helicopter Support (01/02/2028 through 10/14/2028) – 14 Crew Members[1])				
Heavy-Duty Helicopter	3200	Jet	1	2

[1] The Helicopter Support activity covers all helicopter-related activities. As a result, crew member totals reported in other helicopter-related activities may be lower than actually required because they are already accounted for in the Helicopter Support activity.

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
Helicopter	700	Jet	1	4
Jet Fuel Truck	300	Diesel	1	4
Proposed 230 kV OH Segment – Helicopter Landing Pad Construction (01/02/2028 through 08/31/2028) – 2 Crew Members)				
Air Compressor 340/390hp	390	Diesel	1	4
Skid Steer Loader	74	Diesel	1	4
Excavator – Mini	108	Diesel	1	4
Fire Deck (5 hp pump)	5	Diesel	1	1
Water Buffalo Deck (5 hp pump)	5	Diesel	1	2
Vibrating Plate	14	Diesel	1	4
Proposed 230 kV OH Segment – Helicopter Landing Platform Construction (01/02/2028 through 08/31/2028) – 1 Crew Member)				
Air Compressor 340/390hp	390	Diesel	1	4
Fire Deck (5 hp pump)	5	Diesel	1	1
Water Buffalo Deck (5 hp pump)	5	Diesel	1	2
Generator 25 kW	36	Diesel	1	2
Testing Jack (5 hp pump)	5	Diesel	1	2
Micropile Drill Power Unit	310	Diesel	1	8
Refueler (small fuel transfer station)	0	Diesel	1	1
Grount Plant	20	Diesel	1	8
Proposed 230 kV OH Segment – Helicopter Site Preparation (01/02/2028 through 08/31/2028) – 4 Crew Members)				
Jet Fuel Truck	300	Diesel	1	4
Mower/Veg Clearing Equipment	50	Diesel	2	3
Chipper	50	Diesel	1	3
Jackhammer	0	Diesel	1	2
Proposed 230 kV OH Segment – Helicopter Structure Foundation Installation (01/16/2028 through 09/30/2028) – 1 Crew Member)				
Air Compressor 340/390hp	390	Diesel	1	4
Fire Deck (5 hp pump)	5	Diesel	1	1
Water Buffalo Deck (5 hp pump)	5	Diesel	1	2
Generator 25 kW	36	Diesel	1	2
Testing Jack (5 hp pump)	5	Diesel	1	2

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
Micropile Drill Power Unit	310	Diesel	1	8
Refueler (small fuel transfer station)	0	Diesel	1	1
Grout Plant	20	Diesel	1	8
Proposed 230 kV OH Segment – Helicopter Structure Installation (04/01/2028 through 10/14/2028) – 0 Crew Members)				
Fire Deck (5 hp pump)	5	Diesel	1	1
Water Buffalo Deck (5 hp pump)	5	Diesel	1	2
Generator 25 kW	36	Diesel	1	2
Proposed 230 kV OH Segment – Conductor Installation (02/14/2028 through 05/14/2029) – 15 Crew Members)				
Crane – 35 Ton (Manlift)	250	Diesel	3	5
Pickup – ½ Ton	395	Gasoline	4	2
Pickup – 1 Ton	410	Diesel	4	2
D8 Sag Dozer	200	Diesel	3	10
Wire Puller	250	Diesel	1	5
Water Truck	300	Diesel	2	6
Wire Trailer/Tensioner	250	Diesel	1	5
Boom Truck w/ Hydraulic Pole Puller	150	Diesel	1	1
Hydraulic Pole Puller	150	Diesel	1	1
Proposed 230 kV Underground (UG) Segment – Excavate Trench (06/01/2029 through 02/01/2030) – 10 Crew Members)				
Backhoe	150	Diesel	2	6
Arrow Board	10	Diesel	2	8
Air Compressor 340/390 hp	390	Diesel	1	8
Concrete Saw	13	Diesel	1	2
Flatbed Truck	350	Diesel	1	10
Loader	230	Diesel	1	6
Foreman Truck	300	Diesel	3	8
Pickup – 1 Ton	410	Diesel	4	2
Trackhoe	250	Diesel	4	4
Trencher	75	Diesel	2	5
Dump Truck	415	Diesel	3	8
Water Truck	300	Diesel	1	6

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
Light Plant	10	Diesel	4	10
Proposed 230 kV UG Segment – Duct Bank and Conduit Installation (07/01/2029 through 03/01/2030) – 9 Crew Members)				
Backhoe	150	Diesel	2	6
Arrow Board	10	Diesel	2	8
Air Compressor 340/390 hp	390	Diesel	1	8
Flatbed Truck	350	Diesel	1	10
Loader	230	Diesel	1	6
Pickup – 1 Ton	410	Diesel	4	2
Trackhoe	250	Diesel	4	4
Trencher	75	Diesel	2	5
Water Truck	300	Diesel	1	6
Proposed 230 kV UG Segment – Cable Installation (03/02/2030 through 11/30/2030) – 6 Crew Members)				
Cable Reel	175	Diesel	1	5
Arrow Board	10	Diesel	2	8
Pulling Rig	175	Diesel	1	5
Proposed 230 kV UG Segment – Paving (04/02/2031 through 12/01/2031) – 8 Crew Members)				
Concrete Truck	425	Diesel	5	2
Grinder	15	Diesel	1	3
Arrow Board	10	Diesel	2	8
Bitumen (emulsion) Sprayer, Trailer-Mount	5	Diesel	1	1
A/C Roller 5-7 Ton	74	Diesel	1	8
Backhoe	150	Diesel	1	6
Flatbed Truck	350	Diesel	1	10
Pickup – 1 Ton	410	Diesel	4	2
Existing Suncrest Substation – Site Preparation (06/01/2028 through 09/01/2028) –10 Crew Members)				
Backhoe	150	Diesel	2	6
Boom Truck	150	Diesel	1	1
Flatbed Truck	350	Diesel	2	3
Forklift	100	Diesel	1	8
Loader	230	Diesel	1	2

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
Pickup – 1 Ton	410	Diesel	4	2
Water Truck	300	Diesel	1	6
Existing Suncrest Substation – Below-Grade Construction (09/02/2028 through 08/31/2029) – 24 Crew Members)				
Water Truck	300	Diesel	1	6
Excavator	250	Diesel	2	8
Backhoe – 2X4	68	Diesel	2	6
Pickup – ½ Ton	395	Gasoline	4	2
Pickup – 1 Ton	410	Diesel	4	2
Excavator – Mini	108	Diesel	1	8
Generator 25 kW	36	Diesel	1	8
Concrete Truck	425	Diesel	4	5
Loader	230	Diesel	2	8
Pressure Digger – Lo-Drill (Tracked)	275	Diesel	1	5
Dump Truck	415	Diesel	3	10
Tool – Van/Conex 20’	0	Diesel	1	3
Trencher	75	Diesel	2	5
Skid Steel Loader	74	Diesel	2	8
Wire Trailer/Tensioner	250	Diesel	1	5
Wire Puller	250	Diesel	1	3
Existing Suncrest Substation – Above-Grade Construction (09/02/2029 through 08/31/2032) – 26 Crew Members)				
Wire Trailer/Tensioner	250	Diesel	1	5
Wire Puller	250	Diesel	1	3
Pickup – ½ Ton	395	Gasoline	4	2
Pickup – 1 Ton	410	Diesel	4	2
Welding Truck	250	Diesel	2	2
Generator 25 kW	36	Diesel	2	8
Crane – 35 Ton (Manlift)	250	Diesel	2	5
Forklift – 10 K Reach	130	Diesel	2	8
Forklift – 15 K Reach	130	Diesel	1	8
Loader	230	Diesel	2	8

Equipment Name	Anticipated Engine Output (horsepower)	Anticipated Fuel Type	Approximate Quantity	Approximate Daily Use (hours)
120' Manlift	74	Diesel	2	5
Crane – 200 Ton	275	Diesel	1	4
Commissioning and Testing (01/02/2032 through 10/31/2032) – 9 Crew Members)				
Pickup - 1/2 Ton	395	Gas	4	2
Pickup - 1 Ton	410	Diesel	4	2
Crane - 35 Ton (Manlift)	250	Diesel	1	5
Water Truck	300	Diesel	1	6
Tool - Van/Conex 20 Feet	0	NA	3	8
Proposed 230 kV OH Segment – Site and Right-of-Way (ROW) Restoration (06/01/2029 through 10/31/2029) – 14 Crew Members)				
Pickup - 1/2 ton	395	Gas	4	2
Dump Truck	415	Diesel	2	10
Skid Steer Loader	74	Diesel	1	6
Water Truck	300	Diesel	2	6
D6 Type Dozer	250	Diesel	1	6
Motor Grader	250	Diesel	1	6
Haul Truck	425	Diesel	1	10
Excavator – Mini	108	Diesel	1	6
Hydroseed Truck	425	Diesel	1	6
Pickup – 1 Ton	410	Diesel	1	3
Proposed 230 kV UG Segment – Site and ROW Restoration (12/01/2030 through 03/30/2031) – 13 Crew Members)				
Pickup – ½ Ton	395	Gasoline	4	2
Skid Steer Loader	74	Diesel	1	6
Water Truck	300	Diesel	2	6
Haul Truck	425	Diesel	1	10
Excavator – Mini	108	Diesel	1	6
Boom Truck with Hydraulic Pole Puller	150	Diesel	1	6
Water Truck	300	Diesel	1	6
Hydroseed Truck	425	Diesel	1	6
Pickup – 1 Ton	410	Diesel	1	3

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ATTACHMENT 2-C: WILDFIRE MITIGATION PLAN

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Appendix F
SDG&E Fire Prevention Plan

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Attachment 2 – Metal Cutting, Welding and Grinding
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1.0 Scope

This wildland Fire Prevention Plan outlines fire compliance requirements for all SDG&E Operations & Maintenance (O&M) activities authorized by the Master Special Use Permit (MSUP) and performed by SDG&E personnel, contractors (and their subcontractors), and consultants (collectively, SDG&E's Agents) on the Cleveland National Forest (CNF). These activities also include post-construction habitat restoration, access road decommissioning and other mitigation activities associated with the Power Line Replacement Project (PLRP).

This Fire Prevention Plan has been developed to be consistent with those prepared by other Investor-Owned Utilities (IOUs) operating in the United States Forest Service (USFS) Region 5 (Pacific Region), and to serve as an amendment update the original SDG&E Operations & Maintenance Fire Prevention Plan for the CNF that was implemented at the completion of the Sunrise Power Link (SRPL) Project. O&M activities for SDG&E's SRPL are authorized under Special Use Permit (SUP) DRD418696, issued December 2010, and all other O&M activities on the CNF are authorized under the MSUP DRD418600, issued September 2016.

This plan is designed to assist SDG&E in implementing safe work practices to prevent, report, control, and extinguish fires when engaged in permitted O&M activities which are subject to USFS Project Activity Level (PAL) requirements.

2.0 Purpose

SDG&E facilities, equipment, and activities may present a potential wildland fire ignition risk which must be minimized to the extent reasonably possible. In the event a fire occurs, SDG&E must also be equipped to suppress small fires, thus potentially preventing a major fire. Most importantly, SSDG&E must provide the resources and training necessary to keep our employees safe while working in the wildland areas. The intent of this document is to formalize procedures and routine practices that will:

- Assist SDG&E and its Agents in their understanding of fire prevention and to improve their ability to prevent the start of any fire. The emphasis will be on wildland fires, especially during the critical times of the year when the fire risk is high.
- Set standards for fire tools and equipment to be present in vehicles and at work sites. This will assist with rapid response to small fires in the event one should occur.
- Incorporate State, Federal, and local requirements into our standard way of doing business to provide compliance with rules and regulations on a daily basis, no matter where work is taking place. This would include, but not be limited to: California Public Resource Codes, Forest Standard Practice Regulations, and "Special Use Permit" or "Right-of-Way" fire related requirements.
- Identify at risk activities:
    - Driving or parking in areas where exhaust has the potential to contact the vegetation or hot exhaust is close to the vegetation.
    - Activities with open flame or has the potential to create a spark
    - Work on energized lines or equipment including secondary lines
    - Pole replacement
    - Paving operations, earth moving, grading or using heavy equipment with metal tracks in close proximity to vegetation
    - Construction "hot work"; welding, metal cutting or grinding
    - Blasting
    - Vegetation management

- Provide a fire risk and mitigation matrix based on USFS Project Activity Levels (PAL) to set a level for minimum fire prevention mitigations and suppression tool requirements.
- Define or reference restrictions mandated by "Red Flag Warnings," "Project Activity Levels," or other unique fire danger scenarios. Provide the means for determining when these restrictions are in effect, what activities they prohibit, the precise locations to which they apply; and identify the notification procedures for all affected employees, contractors, and consultants. For more detail, refer to Attachment #1, Fire Risk and Mitigation Matrix.
- Require that SDG&E employees, contractors (and their subcontractors) and consultants have positive communication for reporting fires and initiating assistance from all worksites. If there is no connectivity on the worksite they need to know where the closest site is to be able to report a fire. Dialing 911 is the primary means for reporting emergencies.
- Share some commonsense practices, with regards to fire safety, that should be used in all activities to reduce the risk of fires and to prevent injury to employees as a result of fire.

3.0 Responsibilities

SDG&E shall:

- Abide by the requirements of this Fire Prevention Plan for the duration of the master permits and easements (MPEs) issued by the USFS.
- Ensure that a copy of this Fire Prevention Plan and any special permits are known and accessible to project foreman/supervisor on work site daily.
- Take all steps necessary to prevent SDG&E and its Agents from starting fires when conducting authorized O&M activities on the CNF.
- Take reasonable steps to extinguish all such fires that may start and to notify the appropriate emergency response agency immediately or as soon as reasonably possible.
- Shall take reasonable steps necessary to ensure that project employees, subcontractors and their employees are knowledgeable and comply with the requirements of the Fire Prevention Plan.
- Permit and assist in periodic testing and inspection of required fire equipment, including requiring contractors to test and inspect their equipment.
- Demonstrate compliance with all applicable fire activity requirements as defined in this Fire Prevention Plan during the USFS established Fire Precautionary Periods for the CNF.
- Comply with USFS Project Activity Level (PAL) activity and use restrictions for the CNF.
- Share and confirm emergency contact information for the SDG&E, the USFS, and any other fire response agencies as needed or at the SDG&E's biannual meetings with the USFS.
- The Fire Prevention Plan shall be reviewed and revised by SDG&E and USFS at intervals of not more than three (3) years

The USFS may conduct periodic field inspections for compliance with the Fire Prevention Plan. The number, timing, and scope of such inspections will be at the discretion of USFS employees responsible for permit administration. Such inspections do not relieve the SDG&E of responsibility for correcting violations of the Fire Prevention Plan or for fire safety in general, as outlined above.

4.0 Definitions

"**At Risk" Activities:** Activities that have the potential to ignite a wildland fire.

Wildland Areas: This is any area with wildland vegetation (e.g., trees, chaparral, grass, and ground litter) that may support the ignition and spread of a wildland fire. This does not include parking strips, ornamental vegetation or areas that are cultivated, landscaped, and irrigated.

Wildland Fuels: Native or invasive vegetation such as grasses, brush and trees that are not cultivated, planted as landscaping and irrigated.

Fire Patrol Person (Fire Patrol): Under certain PALs, the fire patrol person is required for mechanical operations for 30 minutes after cessation of operations.

- **A Designated "Fire Patrol"** is a member of a work crew assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This can be accomplished co-laterally with other work duties and should be documented on the tailboard form or similar document. If a person is working alone, they will be considered the designated "Fire Patrol" for their activity and no documentation is required.

- **A Dedicated "Fire Patrol"** is a person(s) assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This will be their sole duty while serving as a dedicated Fire Patrol. When a Dedicated Fire Patrol is required, the position must be filled with a SDG&E Contracted Qualified Fire Fighter (QFF).

SDG&E Contracted Qualified Firefighter (QFF): A contracted QFF is an individual that has successfully completed certain wildland firefighter classes required by SDG&E that are deemed necessary to perform fire prevention duties when at risk work requires a Dedicated "Fire Patrol". See SDG&E Electric Standard Practice (ESP) 113.1, Attachment #5 for list of training required.

Fire Precautionary Period: For the purpose of this plan, the Fire Precautionary Period will be considered year-long.

Project Activity Level (PAL): The PAL is a scientifically based system to regulate all industrial and contractual activities on National Forest lands in California. The PAL is designed to reduce the risk of large damaging wildfires and legal vulnerability of the Forest Service, contractors, or permittees. The system is fire danger and climatology based, using Energy Release Comments (ERC) and Ignition Components to determine ratings. Each day after 4:00 p.m. the PAL is announced for the following day for the different geographical areas on Forest Service lands.

Fire Safety Coordinator: The SDG&E "On Duty" Fire Coordinator. This will be the primary contact who serves as a liaison or agency representative to the Cleveland National Forest for the prevention and protection procedures for O&M activities on Forest Service land. On duty phone number is 858-503-5152 and is monitored 24/7.

Hot Saw: A hot saw is a harvesting system that uses a high-speed (>1,100 revolutions per minute) rotating felling head (i.e., full rotation lateral tilt head). Not currently used by SDG&E.

Mechanical Operations: Mechanical operations describe the process of felling, skidding, chipping, shredding, masticating, piling, log processing, and/or yarding that requires the use of motorized power tools, such as chainsaws, chippers, motorized carriages, masticators, stroke delimbers, skidders, loaders, and dozers.

Major Operations Work Area (MOW): It will be considered a major operations work area when work activities or staging of resources will be concentrated in and out of a staging facility. These work sites are typically large in size and include but are not limited to construction yards, fly yards, substation pads, lay down yards and any other area where construction work will be concentrated.

Operations and Maintenance (O&M) Work: The inspection, repair, replacement and general maintenance of permitted SDG&E electric facilities. This includes permitted access roads, structure pad areas, maintenance pads and Temporary Structure Access Pads (TSAPs).

TSAP: Temporary Structure Access Pad Temporary helicopter landing sites used infrequently and requiring minimal maintenance or upkeep.

Emergency Response: Emergency response work is required to resolve a situation that, if not corrected, could compromise SDG&E's transmission or distribution facilities, electric system reliability, or USFS resources. Emergency conditions represent immediate threats to human life, public safety, or property regardless of ownership. This definition is based on 36 CFR §251.50b. and is discussed in more detail in Chapter 3.4 of the SDG&E MSUP O&M Plan.

5.0 Tools and Equipment

5.1 Standard Tools

For each piece of equipment used for authorized O&M activities on the CNF, SDG&E shall furnish and have available the following emergency use hand tools and/or equipment (see California Public Resources Code PRC [PRC] 4427, 4428, and 4431):

- One shovel, one axe (or Pulaski), one 5-gallon backpack pump and a fully charged chemical or compressed air foam fire extinguisher Underwriters Laboratories (UL) minimum rating of 2A:10-B:C, on each truck, personnel vehicle, tractor, grader, and other heavy equipment.
- At least one 4A:80-B:C fire extinguisher or equivalent on each mechanized harvesting machine with hydraulic systems, powered by an internal combustion engine (e.g., chipper, feller/buncher, harvester, forwarder, stroke delimber).
- One shovel and one filled 5-gallon or larger backpack-pump type fire extinguisher with hand pump with each welder.
- One shovel, one Pulaski, and a 5-gallon backpack pump (or minimum 2A10BC fire extinguisher) with each piece of free standing (not vehicle mounted) equipment powered by internal combustion engines (e.g., compressor, generator, welder, etc.)
- One shovel and one 16-ounce or larger pressurized chemical fire extinguisher when using gasoline-powered tools, including but not restricted to, chain saws, soil augers, and rock drills. Fire tools shall at no time be farther from the point of operation of the portable gasoline powered tool than 25 feet with unrestricted access for the operator from the point of operation. Fire extinguishers shall be a standard

multi-use extinguisher unless otherwise specified. The shovel must be kept on hand when chain saws are used off cleared landing areas.

All tools and equipment required above shall be in good workable condition and shall meet USFS requirements for fire tools as follows:

- Shovels shall be size "O" or larger and no less than 46 inches in overall length.
- Pulaski's shall have 2-1/2 pound or larger heads and be no less than 28 inches in overall length.

Concentrations of wood dust and debris shall be removed from all equipment daily or more frequently as required. Standard tools must be kept directly accessible to workers at all times when engaged in work activities described in this Fire Prevention Plan.

5.2 Spark Arrestors (see Attachment F3)

All diesel and gasoline-operated engines, both stationary and mobile, and all flues used in O&M activities shall be equipped with spark arresters that meet current USFS standards set forth in the applicable USFS manuals and guidance, including FSM 5100-Fire Management and the San Dimas Technology & Development Center Spark Arrestor Guide. Spark arresters are not required on equipment powered by exhaust-driven turbo-charged engines or on motor vehicles equipped with a maintained muffler, as defined in California PRC 4442 and 4443.

5.3 Water Tank Truck/Trailer

When required, SDG&E and its Agents may be required to furnish a water tank truck (Water Truck), trailer or portable tank on or immediately adjacent to the project area and meet the following minimum specifications.

- The Water Truck and operator must be ready to put out fire at all times.
- The Water Truck, trailer or portable tank shall contain a minimum of 150 gallons of water at the start of each work period
- A combination straight stream-fog nozzle with a discharge rating of 6 to 20 gallons per minute. The closed nozzle must be capable of withstanding 200 pounds per square inch (psi) pump pressure without leaking, slipping of couplings, distortions, or other failures.
- 300 feet of 1-inch fire hose, with no segment shorter than 50 feet
- A pump capable of delivering at least 23 gallons per minute at 175 psi at sea level
- Power unit for pump shall have fuel for at least two hours operation with ample transport available for immediate and safe movement of tank over roads serving the contract area and shall be in good working order.
- Pump outlet shall be equipped with 1.5-inch National Standard Fire Hose thread.
- When required, the Water Truck, Trailer or Portable Tank may be used for other work on the project.
- When Water Truck, Trailer or Portable Tank is used for other operations, water level must not drop below 50 gallons or activity will stop until water source is replenished to 150 gallons.
- A charged hose lay will be installed capable of reaching 100' beyond the work activity whenever a Water Truck, Trailer or Portable Tank is required.

5.4 Fire Patrol

When required, the responsibility of the Fire Patrol shall be to patrol the work area for prevention and detection of fires, to make sure all State, County and Federal Fire regulations and O&M Fire Prevention Plan conditions are met, and to take suppression action when necessary.

- **Designated "Fire Patrol"** is a member of a work crew assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This can be accomplished co-laterally with other work duties and should be documented on the tailboard form or similar document. If a person is working alone, they will be considered the designated "Fire Patrol" for their activity and no documentation is required.
- **Dedicated "Fire Patrol"** is a person(s) assigned the responsibility and accountability for fire prevention, risk mitigation, early detection of fires, and rapid extinguishment should one occur. This will be their sole duty while serving as a dedicated Fire Patrol. When a Dedicated Fire Patrol is required, the position must be filled with a SDG&E Contracted Qualified Fire Fighter (QFF).
- The Fire Patrol shall remain on duty as specified in the Fire Prevention Mitigation Table F1 below.

6.0 General

6.1 Hot Work (Welding, Metal Cutting or Grinding) (see Attachment F2)

SDG&E and its Agents must secure a special written permit from the USFS District Ranger or designated representative before engaging in Metal Cutting, Welding and Grinding (Application for Permit to Burn APCD Form 14 April 2009 or most current version).

SDG&E and its Agents shall confine all welding, metal cutting or grinding activity to cleared areas with a minimum radius of 10 feet measured from the place of welding and, depending on the assigned PAL, may need to utilize a welding tent or metal shield to deflect sparks. A 30-minute fire watch is required after completion of all hot work.

All Hot Work should be in compliance with NFPA 51B requirements.

6.2 Smoking and Fire Rules

- Smoking shall not be permitted during fire season, except in a barren area or in an area cleared to mineral soil at least 10 feet in diameter (CPRC 4423.4).
- Cigarette butts or other smoking materials are not to be discarded on the ground and must be disposed of in an appropriate receptacle.
- In areas closed to smoking, the USFS representative may approve special areas to be used for smoking.
- SDG&E and its Agents shall assign designated smoking areas.

- SDG&E and its Agents shall post signs regarding smoking and fire rules in conspicuous places for all employees to see.
- SDG&E and its Agent's supervisory personnel shall require compliance with these rules.
- Under no circumstances shall smoking be permitted while employees are operating light or heavy equipment or walking or working in grass and woodlands.
- Fire Rules: NO BURNING ALLOWED, NO OPEN FIRES, unless with a valid permit.

6.3 Storage and Parking Areas

Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material for a radius of at least 10 feet unless otherwise specified by the local administrative unit. Small mobile or stationary internal combustion engine sites shall be cleared of flammable material for a slope distance of at least 10 feet from such engine. The appropriate project personnel shall approve such sites in writing.

6.4 Oil Filter and Glass Jugs

SDG&E shall remove all oily rags and used oil filters from the CNF. SDG&E shall prohibit the use of glass bottles and jugs during authorized O&M activities on the CNF.

6.5 Clearing of Fuels from Equipment Areas

Welding equipment and stationary log loaders, yarders, and other equipment listed in California State Law shall be cleared of all fuels and logging debris for a slope distance of at least 10 feet.

6.6. Investigation of Utility Related Fires

SDG&E agrees to engage in mutual cooperation with the USFS on all fire investigations.

6.7 Communications

SDG&E shall furnish an agreed-upon communication system connecting each operation with the designated USFS Dispatch Center. The communications system shall be capable of contacting the designated USFS Dispatch Center within five (5) minutes of discovery of a fire in SDG&E's or its Agents work area(s). The communications system shall be operable during the duration of authorized O&M activities on the CNF. The individual responsible for communications must understand how to operate this device and possess it on his/her person at all times or be within a reasonable distance for access.

6.8 Roads

USFS roads on the CNF shall remain open and passable for public, administrative, and emergency use.

6.9 Training

SDG&E and its Agents will receive fire safety and prevention training prior to performing operations and maintenance activities on the CNF. Training will be based on the SDG&E Operations & Maintenance Plan and this Fire Prevention Plan.

7.0 Project Activity Level

The PAL is a decision support tool designed to help fire and timber resource managers establish the level of industrial precaution for the following day. This tool utilizes outputs from the National Fire Danger Rating System, the accepted interagency fire danger model that represents the interaction between fuels, weather, topography, and fire occurrence. The PAL is designed to reduce the risk of large, damaging wildfires and the legal vulnerability of the USFS, its contractors, and permittees.

All SDG&E O&M activities being conducted on the CNF must be in compliance with the applicable PAL restrictions and activity requirements, as described in Table F-1 below. SDG&E and its Agents shall conform to the limitations or requirements of the PAL obtained from the USFS before starting work each day. If practicable, the USFS will determine the following day's activity level on the CNF by 4:00 p.m. local time each afternoon.

Exceptions:

1. For all Class IV O&M activities defined as “Emergency Response” (see definitions and Chapter 3 of the O&M Plan)
2. Work may continue in order to mitigate the risk associated with an electric circuit in a compromised or abnormal configuration. The USFS may require additional fire prevention/suppression measures during this period

Instructions for Obtaining the PAL Information:

SDG&E’s permitted infrastructure and facilities on the CNF are located in portions of Fire Danger Rating Areas (FDRA) Inland and Mountain. The PAL for the FDRA where the O&M work takes place will apply. Level A represents the lowest fire danger while Level E represents the highest fire danger.

PAL may be obtained from the USFS before starting work each day. The USFS determines the following day’s activity level by 4:00 PM each day.

SDG&E and its Agents can obtain the PAL for the following day by calling 619-557-5262 (24-hour number) after 4:00 PM and asking the Dispatcher for the PAL in the FDRA where the next day’s O&M work will occur.

SDG&E and the CNF may agree to a variance for operations at levels B, C, D & Ev. When approved by a Forest Supervisor or delegated USFS staff specified by the USFS, a Variance Agreement can be implemented when the criteria specified in the agreement are met and the necessary fire activity requirements are in place. This approval is valid for 10 calendar days unless cancelled sooner or extended by the Forest Supervisor or designated USFS representative for an additional 10 calendar days. Variance Agreement approval can be withdrawn at the sole discretion of the USFS . The USFS will specify to SDG&E the information necessary to make a variance request for O&M activities on the CNF.

CNF Authority to Change PAL Levels or Stop Work Activities:

The USFS may change the PAL at any time if the fire danger is higher or lower than predicted and the change is consistent with forest management objectives. The USFS has the discretion to decide when to change the PAL and to what level, and how weather observations should be used to determine the appropriate PAL.

SDG&E's authorized O&M activities may be shut down by the USFS at any time due to changes in weather conditions, active fire in the area, local Ranger District drawdown conditions, and/or violation of any requirements of this Fire Prevention Plan. Permission to resume work can only be issued by the USFS and shall be in writing.

8.0 Red Flag Warnings

RED FLAG WARNING

If a Red Flag is issued (despite the PAL level), all work will cease and be suspended until the warning is cancelled and the USFS approves a resumption of the project

Exception: For those O&M activities defined as "Emergency" *(see definitions)*

What is a Red Flag Warning?

Red Flag Warning (RFW) is a term used by fire weather forecasters and fire agencies to call attention to limited conditions of particular importance that may result in extreme burning conditions. The Warning is issued when there is an ongoing event or the fire weather forecaster has a high degree of confidence that Red Flag criteria will occur within 24 hours of issuance. Red Flag criteria occurs whenever a geographical area has been in a dry spell for a week or two or for a shorter period, if before spring green up or after fall color, and the National Fire Danger Rating System (NFDRS) is high to extreme and the following forecast weather parameters are forecasted to be met:

- Relative humidity less than or equal to 15 percent with sustained winds = 25 mph and/or frequent gusts = 35 mph for = 6 hrs.
- Dry lightning (more than isolated coverage)

Further information regarding Red Flag Warning Conditions can be found in the 2012 California Fire Weather Annual Operating Plan at the link below.

Fire Weather Zone Interactive map can be found at: https://www.wrh.noaa.gov/fire2/?wfo=sgx
This map can be used to verify if your work is in an area covered by the RFW.

9.0 SDG&E Fire Contacts

SDG&E shall coordinate with the USFS to obtain and confirm emergency contact information and verify emergency reporting procedures, including providing SDG&E fire contacts for each project or planned work activity.

SDG&E and the USFS shall also confirm PAL contact/recording information where work is anticipated.

SDG&E shall identify and make known to the USFS a qualified Fire Safety Coordinator, as defined in this Fire Prevention Plan, each operating day when authorized O&M activities are occurring on the CNF with a PAL B or higher level in effect.

The Fire Safety Coordinator shall ensure clear and open communication between SDG&E and the USFS regarding any changes in fire conditions, incidents, or other fire-related information.

When required according to work activity and the PAL, SDG&E shall provide a designated or Dedicated fire patrol person whose responsibility the job site fire prevention and detection of fires; take suppression action where necessary; and notify the Fire Safety Coordinator and USFS as required of any changes in fire conditions, incidents, or fires.

The fire patrol person is required to walk the site to assess fire risk and ensure mitigation measures in the Fire Prevention Plan are in place.

Prior to commencing work, SDG&E shall identify and make available the Fire Safety Coordinator and Fire Patrol person's contact information.

Table 1. SDG&E Fire Coordinators (in order of call preference)

POINT OF CONTACT	NAME	TELEPHONE
SDG&E On Duty Fire Coordinator	Various	858-503-5152
SDG&E Fire Science &Coordination Program Manager	Richie Veihl	619-248-0847
SDG&E Fire Coordinator	Bill Molumby	619-843-7304
SDG&E Fire Coordinator	Mike Rottenberg	619-756-5947
SDG&E Fire Coordinator	Burke Kremensky	858-226-8118
SDG&E Fire Coordinator	Scott Perkins	707-654-3473
SDG&E Fire Coordinator	Daryll Pina	619-937-1502

Table 2. USFS Contacts (not in order of call preference)

Additional notification and reporting may be necessary to the following Forest Service Unit Personnel

POINT OF CONTACT	NAME	TELEPHONE
Monte Vista Interagency Communication Center (MVICC)	Forest Service Dispatcher	619-557-5262 (Emergency 911)
Descanso District Fire Management Officer	Michael Tucker	619-445-6235
Descanso District Ranger	Kyle Smith	619-445-6235
Descanso District Utilities Coordinator	Joe Raffaele/Joe Pillot	619-889-2483
Descanso District Fire Patrol	Various	619-445-1725
Palomar District Fire Management Officer	Clinton Green	760-788-0250
Palomar District Ranger	Amy Reid	619-889-2483
Palomar District Permit Administrator	Joe Raffaele/Joe Pillot	619-889-2483
Palomar District Fire Patrol	Various	

10.0 Reporting All Wildland Fires

Upon discovery, the SDG&E and its Agents shall immediately notify the USFS of any fires within the CNF by calling the Forest Service Dispatch Center at 619-557-5262 and/or calling 911.

- SDG&E will notify the USFS of any fires in O&M activity work areas or along roads on Forest Service land used by SDG&E immediately or as soon as reasonably possible.

- The SDG&E on duty Fire Safety Coordinator shall report all fires as soon as possible to the USFS facilities and/or personnel listed in Section 9.0 above, USFS Contact Information.

When reporting a fire, SDG&E shall provide the following information:

- Reporting person's name
- Call-back telephone number
- Project name (if applicable)
- Location: pole number, legal description (township, range, section) or GPS coordinates and a descriptive location or local reference point
- Fire information, including approximate number of acres, rate of spread, and wind conditions, what's burning/type of fire

Attachment F.1
SDG&E Fire Risk and Mitigation Matrix

Project Activities		PAL Level (SDG&E O&M Activities on the CNF)					
Standard Tool Package		1 round point shovel, 1 Pulaski, 1 (5) gallon backpack pump, a fully charged 2A10BC fire extinguisher					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
If your activity does not fall into a specific category consult the fire prevention plan, ask your FCA, or reach the Project Fire Coordinator/s for clarification. It is your responsibility to know what mitigation tools are required for your activity	**Expected tools for activity; If you use multiple tools or are doing multiple activities you must consult multiple boxes in the matrix. If a vehicle containing the appropriate tools for the activity is parked within the required distance for the activity, those tools meet the requirements of the fire prevention mitigation measure**	**The PAL for the following day can be obtained after 4:00pm by calling (619) 557-5262 and asking the Dispatcher for the PAL for the Fire Danger Rating Area where work will occur**					
Privately Owned Vehicle (POV)	A privately-owned vehicle **used as transportation and parked in a yard ONLY.** (Parking areas must have adequate clearance from combustible material)	No tools required	No tools required	No tools required	No tools required	No tools required	Activity Not Permitted without prior approval from Project Mgr., Construction Supe, or Field Contract Advisor with consult with Fire Coordinator
O&M Vehicles & POV's on the ROW or worksites	Company owned vehicles, Vehicles with company markings, and equipment, and POV's	Standard Tool Package	Standard Tool Package	Standard Tool Package	Standard Tool Package	Standard Tool Package	Activity Not Permitted without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator
Fire Box	3 shovels, 2 Pulaski's, 2 McLeods and 1 full 5-gallon backpack pump.	May be required by Forest Service or Fire Coordination depending on the location and/or site conditions	May be required by Forest Service or Fire Coordination depending on the location and/or site conditions or/s due to site conditions	May be required by Forest Service or Fire Coordination depending on the location and/or site conditions	May be required by Forest Service or Fire Coordination depending on the location and/or site conditions	May be required by Forest Service or Fire Coordination depending on the location and/or site conditions	May be required by Forest Service or Fire Coordination depending on the location and/or site conditions
Helicopter Operations	Helicopter **See specific work activity for tools/equipment involved in helo supported operations. May use Temporary Structure Access Pads (TSAPs)**	Helicopter staging areas will be treated like other staging areas with enough fire equipment for personnel on site or fire box available on MOWs. On TSAPs adequate firefighting equipment shall be carried on the helicopter for the number of personnel working on the ground at those sites.	Helicopter staging areas will be treated like other staging areas with enough fire equipment for personnel on site or fire box available on MOWs. On TSAPs adequate firefighting equipment shall be carried on the helicopter for the number of personnel working on the ground at those sites.	Helicopter staging areas will be treated like other staging areas with enough fire equipment for personnel on site or fire box available on MOWs. On TSAPs adequate firefighting equipment shall be carried on the helicopter for the number of personnel working on the ground at those sites.	Helicopter staging areas will be treated like other staging areas with enough fire equipment for personnel on site or fire box available on MOWs. On TSAPs adequate firefighting equipment shall be carried on the helicopter for the number of personnel working on the ground at those sites.	See specific work activity for tools/equipment involved in the operations, and the mitigation measures for that activity	Activity Not Permitted without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator

Project Activities		**PAL Level (SDG&E O&M Activities on the CNF)**					
Standard Tool Package		**1 round point shovel, 1 Pulaski, 1 (5) gallon backpack pump, a fully charged 2A10BC fire extinguisher**					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
If your activity does not fall into a specific category consult the fire prevention plan, ask your FCA, or reach the Project Fire Coordinator/s for clarification. It is your responsibility to know what mitigation tools are required for your activity	**Expected tools for activity; If you use multiple tools or are doing multiple activities you must consult multiple boxes in the matrix. If a vehicle containing the appropriate tools for the activity is parked within the required distance for the activity, those tools meet the requirements of the fire prevention mitigation measure**	**The PAL for the following day can be obtained after 4:00pm by calling (619) 557-5262 and asking the Dispatcher for the PAL for the Fire Danger Rating Area where work will occur**					
Unmanned Aerial Vehicle (UAV)Missions (Drone Missions)	UAV's **Battery Powered Only** - Must comply with Project Vehicle/POV on ROW/Worksite compliance requirements	Standard Tool Package	Standard Tool Package	Standard Tool Package	Standard Tool Package. UAV must take-off and land within 50' of remote pilot in charge	Standard Tool Package. UAV must take-off and land within 50' of remote pilot in charge	Activity Not Permitted without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator
Gasoline Powered Hand Tools	Chain saw, Weed Eater, etc.... (Spark Arrester Required)	Standard Tool Package within 50', There must be one shovel and a 16 oz or better fire extinguisher within 25'of the work. Assign a Designated Fire Patrol	Standard Tool Package within 50', There must be one shovel and a 16 oz or better fire extinguisher within 25'of the work. Assign a Designated Fire Patrol	Standard Tool Package within 50', There must be one shovel and a 16 oz or better fire extinguisher within 25'of the work. Assign a Designated Fire Patrol	Standard Tool Package within 50', There must be one shovel and a 16 oz or better fire extinguisher within 25'of the work. Assign a spotter/swamper during operations. Designated fire patrol required.	Standard Tool Package within 50', There must be one shovel within 25' or a fire extinguisher in the operator's immediate possession. Assign a spotter/swamper during operations. **Dedicated Fire Patrol Required**	Activity Not Permitted

Project Activities		**PAL Level (SDG&E O&M Activities on the CNF)**					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
Gasoline Powered Tool Fueling (Chain saw, Weed Eater, chipper, generator…)	Gas can/truck	Equipment may be refueled after cooling and in an area with a minimum of 10' of clearance, Shovel and Fire extinguisher within 25'.	Equipment may be refueled after cooling and in an area with a minimum of 10' of clearance, Shovel and Fire extinguisher within 25'.	Equipment may be refueled after cooling and in an area with a minimum of 10' of clearance, Shovel and Fire extinguisher within 25'.	Equipment may be refueled after cooling and in an area with a minimum of 10' of clearance, Shovel and Fire extinguisher within 25'.	Activity Not Permitted without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator	Activity Not Permitted
Combustion engines	Generators, Compressors, any piece of non-vehicular equipment with a combustion engine ***Not integral to the operation of a foundation drill**	Standard Tool Package; + While operating equipment must have 5' of clearance on all sides and no combustible material underneath; ensure equipment that requires a spark arrestor has it installed properly	Standard Tool Package; + While operating equipment must have 5' of clearance on all sides and no combustible material underneath; ensure equipment that requires a spark arrestor has it installed properly	Standard Tool Package; + While operating equipment must have 5' of clearance on all sides and no combustible material underneath; ensure equipment that requires a spark arrestor has it installed properly	Standard Tool Package; + While operating equipment must have 5' of clearance on all sides and no combustible material underneath; ensure equipment that requires a spark arrestor has it installed properly	Activity may take place only with unit mounted on the vehicle, on roadway Standard Tool Package within 50'. While operating equipment must have 10' of clearance on all sides. Ensure equipment that requires a spark arrestor has it installed properly. **Designated Fire Patrol Required**	Activity may take place **only in a cleared MOW**; Standard Tool Package within 50'. While operating equipment must have 10' of clearance on all sides. Ensure equipment that requires a spark arrestor has it installed properly. **Designated Fire Patrol Required**
Chipping	Chippers, Tree Grinders	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet **Designated Fire Patrol Required**	Standard Tool Package within 50 feet, **100 gallons of water with pump and hose on site** Area is wet down sufficiently to prevent ignitions **Designated Fire Patrol Required**	Standard Tool Package within 50 feet, 150 gallons of water with pump and hose on site, Area is wet down sufficiently to prevent ignitions. **Dedicated Fire Patrol required**	Activity Not Permitted
Hot Work: Welding , Metal Cutting, Grinding Must obtain Permit from Forest Service	Generators, Welder, Grinder, CAD Weld equipment	All welding, cutting and other hot work will follow a hot work program that will at minimum meet the standards set in NFPA 51B, CFC Chapter 35 and have Standard Tool Package within 50 feet; 10' of clearance, Wet down surrounding area, **A Designated Fire Patrol required and must be present during work and 30 minutes after hot work is complete**	All welding, cutting and other hot work will follow a hot work program that will at minimum meet the standards set in NFPA 51B, CFC Chapter 35 and have Standard Tool Package within 50 feet; 10' of clearance, Wet down surrounding area, **A Designated Fire Patrol required and must be present during work and 30 minutes after hot work is complete**	All welding, cutting and other hot work will follow a hot work program that will at minimum meet the standards set in NFPA 51B, CFC Chapter 35 and have Standard Tool Package within 50 feet; 10' of clearance, Wet down surrounding area, **A Dedicated Fire Patrol required and must be present during work and 30 minutes after hot work is complete**	All welding, cutting and other hot work will follow a hot work program that will at minimum meet the standards set in NFPA 51B, CFC Chapter 35 and have Standard Tool Package within 50 feet; 10' of clearance, Wet down surrounding area, **A Dedicated Fire Patrol required and must be present during work and 30 minutes after hot work is complete**	Activity Not Permitted	Activity Not Permitted

Project Activities		**PAL Level (SDG&E O&M Activities on the CNF)**					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
Aerial Hot work **(in addition to Hot Work requirements)** Must obtain Permit from Forest Service	Any hot work that occurs with the welder's feet above ground level. Hot work should not be performed with a tool over a crew members head.	A site-specific plan will be discussed and implemented when hot work is required to be performed higher than 6 feet off the ground. To the best of the ability of the project personnel, hot work should be accomplished at ground level.	A site-specific plan will be discussed and implemented when hot work is required to be performed higher than 6 feet off the ground. To the best of the ability of the project personnel, hot work should be accomplished at ground level.	A site-specific plan will be discussed and implemented when hot work is required to be performed higher than 6 feet off the ground. To the best of the ability of the project personnel, hot work should be accomplished at ground level.	A site-specific plan will be discussed and implemented when hot work is required to be performed higher than 6 feet off the ground. To the best of the ability of the project personnel, hot work should be accomplished at ground level.	Activity Not Permitted	Activity Not Permitted
Removal and/or installation of fencing and/or berms	Hand tools, Loader with fence post installer/remover, Tractor, Ditch Witch	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet + **150 gallons of water with pump and hose on site**, Area is wet down pre and post work to sufficiently prevent ignitions.	1 round point shovel, 1 Pulaski, 1 (5) gallon backpack pump, a fully charged 2A:10B:C Fire Extinguisher within 50 feet; **150 gallons of water with pump and hose on site. Dedicated Fire Patrol Required**	Activity Not Permitted
Grading, Road Maintenance, Scraping and Trenching	Bulldozer, Excavator, Scraper, Heavy equipment,	Standard Tool Package within 50 feet, **150 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions	Standard Tool Package within 50 feet, **150 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions	Standard Tool Package within 50 feet + **150 gallons of water with pump and hose on site**, Area is wet down pre and post work to sufficiently prevent ignitions**.** **Designated Fire Patrol Required**.	Standard Tool Package within 50 feet + **150 gallons of water with pump and hose on site**, Area is wet down pre and post work to sufficiently prevent ignitions. Standard Tool Package within 50 feet + **150 gallons of water with pump and hose on site**, Area is wet down pre and post work to sufficiently prevent ignitions. **Designated Fire Patrol Required**	Activity Not Permitted	Activity Not Permitted
Structure Erection/Pole Setting	Crane, Forklift **(See specific work activity for other tools/equipment involved in operations**	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet, **150 gallons of water with pump and hose on site,** Area is wet down sufficiently to prevent ignitions, **Dedicated Fire Patrol Required**	Activity Not Permitted
Foundation Pouring	Concrete Trucks, Generators, Hand tools, etc	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet		Activity Not Permitted

Project Activities		**PAL Level (SDG&E O&M Activities on the CNF)**					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
Erosion Control (BMP)	**Hand tools, battery powered tools, and/or non-ferrous tools only** (If fuel powered equipment is used, see "Gasoline Powered Hand Tools" section)	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet, Area is wet down sufficiently to prevent ignitions, **Dedicated Fire Patrol Required**	Activity Not Permitted without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator
Erosion Control	Heavy equipment	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet, **100 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions	Standard Tool Package within 50 feet, **100 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions **Designated Fire Patrol Required**	Standard Tool Package within 50 feet, **150 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions **Designated Fire Patrol Required**	Activity Not Permitted	Activity Not Permitted
Pad Clearing	Bulldozer, Excavator, hand tools, Steel Track equipment	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet, **100 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions	Standard Tool Package within 50 feet, **100 gallons of water with pump and hose on site**, Area is wet down sufficiently to prevent ignitions **Designated Fire Patrol Required**	Standard Tool Package within 50 feet, **150 gallons of water with pump and hose on site**. Area is wet down sufficiently to prevent ignitions **Designated Fire Patrol Required**	Activity Not Permitted	Activity Not Permitted
Vegetation Clearing	**Hand tools, battery powered tools, and/or non-ferrous tools only** (If fuel powered equipment is used, see "Gasoline Powered Hand Tools" section	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet, Area is wet down sufficiently to prevent ignitions, **Dedicated Fire Patrol Required**	Activity Not Permitted
General Construction activities **(Benign work activity conducted with hand/mechanical/non-fuel powered tools or equipment; e.g., archaeological pre-digs)**	**Hand tools or battery powered tools only** (No fuel powered tools; e.g., shovels, mechanic tools, non-ferrous hammer-type tools, wheel barrows, and material screens	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet	Standard Tool Package within 50 feet **Designated Fire Patrol**	Can only take place in a MOW with prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator **Dedicated Fire Patrol Required**

Project Activities		PAL Level (SDG&E O&M Activities on the CNF)					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
Monitoring and Assessment of: Vegetation, Wildlife, Cultural, etc.	Recording data and taking pictures with Project vehicles, or POV	Standard Tool Package Communications must be maintained at all times	Standard Tool Package Communications must be maintained at all times	Standard Tool Package Communications must be maintained at all times	Standard Tool Package Communications must be maintained at all times	Activity may be permitted with prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator	Activity may be permitted with prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator
Dust abatement: Wetting the sites, roads or any other area on the ROW	Water Trucks	Standard Tool Package	Standard Tool Package	Standard Tool Package	Standard Tool Package	Activity Not Permitted outside a MOW without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator	Activity Not Permitted outside a MOW without prior approval from Project Mgr., Construction Supervisor, or Field Contract Advisor with consultation with Fire Coordinator
Smoking	Cigarettes, Cigars, etc…	Smoke only in designated smoking areas that are signed, flagged off and have a butt can or in a 10’ diameter circle cleared of all vegetation down to bare soil. Butts and other smoking materials must not to be discarded on the ground and must be disposed of in an appropriate receptacle.	Smoke only in designated smoking areas that are signed, flagged off and have a butt can or in a 10’ diameter circle cleared of all vegetation down to bare soil. Butts and other smoking materials must not to be discarded on the ground and must be disposed of in an appropriate receptacle.	Smokers may only smoke in a MOW in a signed, flagged off, designated smoking area with a butt can. Butts and other smoking materials must not to be discarded on the ground and must be disposed of in an appropriate receptacle	Smokers may only smoke in a MOW in a signed, flagged off, designated smoking area with a butt can. Butts and other smoking materials must not to be discarded on the ground and must be disposed of in an appropriate receptacle	Activity Not Permitted	Activity Not Permitted
Conductor Replacement (working with de-energized lines)	Replacement of conductor, wire spreading, wire puling	Standard Tool Package within 50’	Standard Tool Package within 50’	Standard Tool Package within 50’ Designated Fire Patrol assigned with minimum 150 gallons required if utilizing stringing equipment powered by a combustion engine	Standard Tool Package within 50’ Designated Fire Patrol assigned with minimum 150 gallons required if utilizing stringing equipment powered by a combustion engine.	Fire Patrol assigned with minimum 150 gallons at required if utilizing stringing equipment powered by a combustion engine.	Activity Not Permitted
Conductor Replacement (working with energized lines	Replacement of conductor, wire spreading, wire pulling	Standard Tool Package within 50’	Standard Tool Package within 50’	Standard Tool Package within 50’, Dedicated Fire Patrol assigned with minimum 150 gallons	Standard Tool Package within 50’, Dedicated Fire Patrol assigned with minimum 150 gallons	Activity Not Permitted	Activity Not Permitted
OTHER ACTIVITY/EQUIPMENT REQUIREMENTS:							

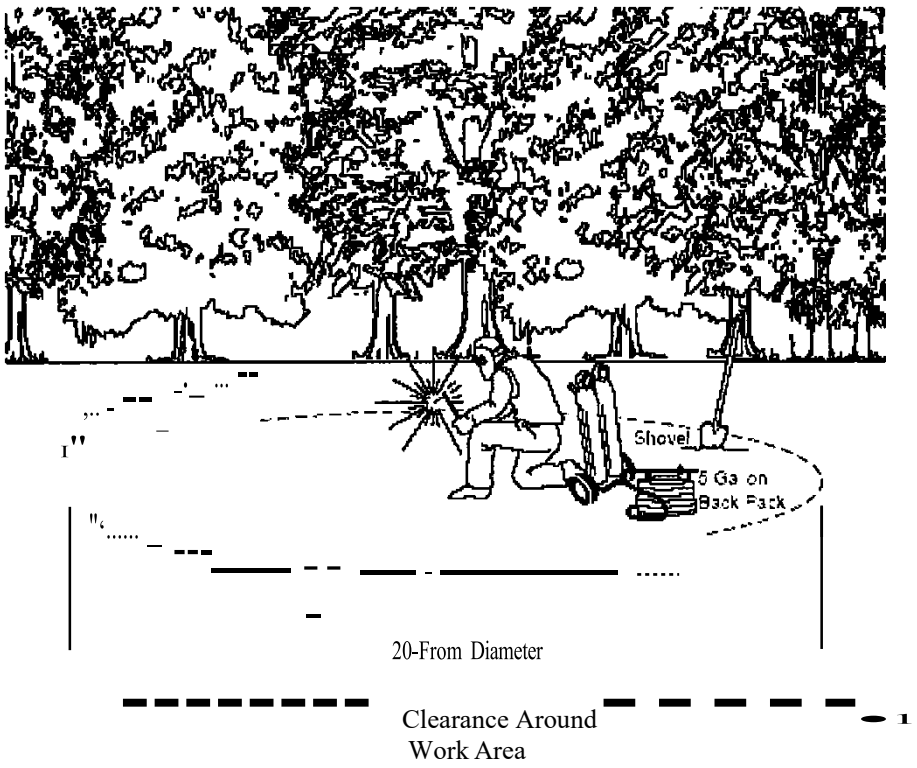
Project Activities		PAL Level (SDG&E O&M Activities on the CNF)					
ACTIVITY	**ACTIVITY TOOLS AND EQUIPMENT**	**A**	**B**	**C**	**D**	**Ev**	**E and RFW**
Spark Arresters: All internal combustion engines shall have approved spark arresters; Engines used to provide motive power for trucks, tractors, buses, and passenger vehicles, except motorcycles, are exempt if the exhaust system is equipped with a muffler; Turbocharged engines are exempt.							
Drive in sites: Standard fire mitigation tools on vehicles will meet the requirements. If the work site is more than 50' from the vehicle the tools will need to be moved from the vehicle to the site. Vehicle must remain stationary while tools are removed.							
				On-Duty Fire Coordinator: (858) 503-5152			Final Revision 10/10/2023

Attachment F.2
Metal Cutting, Welding and Grinding

A California Inter-Agency Burning permit is required for all metal cutting, metal grinding, and welding operations. This permit may be obtained from the Forest Service. Contact District Fire Prevention personnel at 619-445-1725 to obtain the permit. Permits expire at the end of the calendar year or upon terms of the permit.

Welding and metal grinding have caused numerous wildfires in California. The following graphic and guidelines are designed to help mitigate fire starts caused by sparks, slag, or hot metal falling into dry vegetation fuel beds.

- Clear and maintain to bare soil a minimum 10-foot area from work site of dead grass, brush, and other combustibles.
- Have a shovel at the work site.
- Have a 5-gallon backpack pump-type fire extinguisher filled with water ready for emergency use.
- Follow Attachment F.1. SDG&E Fire Risk and Mitigation Matrix for appropriate fire patrol to remain on site during work and 30 minutes after completion of work.
- Where practicable, use a welding tent or shield to contain welding and grinding sparks.



Proper clearances around welding operation.

All Construction “hot work” must all be in compliance with NFPA 51B requirements

Attachment F.3
Spark Arrestor Information

USDA Forest Service-approved spark arrestors are required on all internal combustion engines. Heavy equipment that is diesel and turbo charged are exempt from this requirement. All vehicles, such as dump trucks that are licensed and otherwise registered for highway travel, are also exempt from the spark arrestor requirement. (See Fire Plan Section 3: Tools and Equipment and Attachment 2: Exhaust Systems and Spark Arrestors, for additional information on Spark Arrestors).

Vehicle exhaust systems start fires in two ways: (a) an emission of hot carbon particles, and (b) direct contact with flammable materials and vegetation. Contact with flammable materials may occur by a collection of flammables on manifolds and inside heat shields or by parking where flammable vegetation may come in close proximity or contact to exhaust systems and other components. Fire ignition by direct contact most often occurs with a vehicle muffler, catalytic converter, or exhaust pipe. Operating temperatures of any of these components are well above the ignition temperature of dry wildland fuels. Vehicles should always and only be parked on an area cleared of all flammable materials.

All internal combustion engines operating on forest or grass covered lands in California are required to be equipped with an effective spark arrester. Muffler equipped trucks, buses, and passenger vehicles are exempt provided they are licensed and registered for highway travel and the exhaust system has not been modified. Heavy equipment—such as road graders, rubber tired front-end loaders, and caterpillar tractors that are diesel powered and are equipped with a turbo charger where 100% of the exhaust is recycled through the turbo charger—are exempt from the spark arrester requirement. All portable gasoline generators, chain saws, and weed eaters are required to have a spark arrester on the exhaust system.

For further information, the Approved Spark Arrestor Guide List is available online at http://www.fs.fed.us/t-d/programs/fire/spark/sag-index.html

CHAPTER 3 – ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

3.1 APPROACH TO THE ENVIRONMENTAL ANALYSIS

San Diego Gas & Electric Company (SDG&E) has prepared this Administrative Draft Environmental Impact Report (EIR), which evaluates the environmental impacts of the Suncrest 230 Kilovolt Loop-In Project (Proposed Project) in accordance with the following:

- the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.),
- the Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-Filing and Proponent's Environmental Assessments,
- the CEQA Guidelines (Title 14 California Code of Regulations Section 15000 et seq.), and
- California Public Utilities Commission (CPUC) General Order (GO) 131-E.

3.1.1 Content of This Chapter

Environmental analysis of the Proposed Project by resource area is provided in Sections 3.2 through 3.21 of this Administrative Draft EIR. These sections present the environmental and regulatory setting, impact questions, methodology, environmental impact analysis, and in some instances, Applicant-Proposed measures (APMs) or mitigation measures (MMs) to reduce the level of potential environmental impacts. Tables and figures are included within the text of each section. The sections are organized as follows:

- Section 3.2 Aesthetics
- Section 3.3 Agriculture and Forestry Resources
- Section 3.4 Air Quality
- Section 3.5 Biological Resources
- Section 3.6 Cultural Resources
- Section 3.7 Energy
- Section 3.8 Geology, Soils, and Paleontological Resources
- Section 3.9 Greenhouse Gas Emissions
- Section 3.10 Hazards and Hazardous Materials
- Section 3.11 Hydrology and Water Quality
- Section 3.12 Land Use and Planning
- Section 3.13 Mineral Resources
- Section 3.14 Noise
- Section 3.15 Population and Housing
- Section 3.16 Public Services
- Section 3.17 Recreation
- Section 3.18 Transportation
- Section 3.19 Tribal Cultural Resources
- Section 3.20 Utilities and Service Systems
- Section 3.21 Wildfire

Each resource area includes the following components:

- **Environmental Setting**: The environmental setting examines the existing physical setting (i.e., baseline conditions as determined pursuant to Section 15125[a] of the CEQA Guidelines) that may be impacted by the Proposed Project.

- **Regulatory Setting**: The regulatory setting provides a discussion of federal, state, and local regulations, plans, policies, and/or laws that are directly relevant to the environmental resource area being analyzed.

- **Applicant-Proposed Measures, Impact Analysis and Mitigation Measure**s

  - **Applicant-Proposed Measures:** As part of the Administrative Draft EIR, SDG&E identified APMs to avoid and/or minimize impacts from the Proposed Project during construction and/or operations and maintenance activities. The APMs are a combination of best management practices and standard SDG&E protocols based on SDG&E's experience with utility infrastructure projects.

  - **Impact Questions**: The impact questions section identifies the criteria used to determine when physical changes to the environment as a result of the Proposed Project would be considered significant. The significance criteria serve as a benchmark for determining if a project would result in a significant adverse environmental impact when evaluated against the baseline. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area" affected by the Proposed Project. The significance determination under each impact analysis is made by comparing the construction and operation and maintenance impacts of the Proposed Project with the baseline conditions in the Environmental Setting section and comparing the difference to the significance criteria.

  - **Impact Analysis**: The impact analysis section identifies the methodology used to analyze potential environmental impacts for each resource area. Some evaluations may be quantitative, while others are qualitative. This section includes the analysis of potential impacts associated with each resource area. The impacts are compared to the significance criteria to determine the level of significance.

    The impact sections focus on impacts that are considered potentially significant per the requirements of CEQA. An impact is considered significant if it leads to a "substantial, or potentially substantial, adverse change in the environment." Impacts from the Proposed Project fall within one of the following categories:

    - **No Impact:** No impact was identified to the identified resource as a result of the Proposed Project.

    - **Less-than-Significant Impact:** Some impacts may result from the Proposed Project; however, they were determined to be less than significant. Impacts are

frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource. A less-than-significant impact applies when the environmental impact does not exceed the significance threshold or, with the proper mitigation measures, the impacts have been reduced to less than significant.

- **Less-than-Significant Impact with Mitigation Incorporated:** Significant adverse impacts may occur; however, with the application of enforceable mitigation, the impacts would be reduced to less than significant.

- **Potentially Significant Impact:** Adverse impacts may be significant even after mitigation measures have been incorporated into the Proposed Project to minimize their severity. A potentially significant or significant impact applies when the environmental impact exceeds the significance threshold, or substantial evidence in the record of proceedings was lacking which would allow the CPUC to make a less-than-significant impact determination.

- **Mitigation Measures:** For instances where the impact analysis in the Administrative Draft EIR indicated that potentially significant adverse impacts could occur from the Proposed Project even with the implementation of the APMs, MMs were identified to further reduce, rectify, or compensate for the impact's severity. In instances where MMs are applied, the impacts would be reduced to less than significant with the implementation of the MM.

3.1.2 References

Association of Environmental Professionals. 2025. California Environmental Quality Act Statute & Guidelines.

California Legislative Information. 2025. Public Resources Code – PRC. Online. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=PRC&tocTitle=+Public+Resources+Code+-+PRC. Site visited April 2025.

Code of Federal Regulations. 2025. Online. https://www.ecfr.gov/. Site visited April 2025.

CPUC. 2019. Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/c/6442463239-ceqa-pre-filing-guidelines-pea-checklist-nov-2019.pdf. Site visited April 2025.

CPUC. 2025. General Order No. 131-E. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/proceedings-and-rulemaking/documents/general-orders/go-131-e.pdf. Site visited April 2025.

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3.2 AESTHETICS

This section describes the existing conditions for aesthetics in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.2.1 Environmental Setting

3.2.1.1 Regional Setting

San Diego County is characterized by three distinctive geographic resources: the low-lying Coastal Plain, the mountainous Peninsular Range, and the lowland of the desert. Urban land uses are concentrated in the western portion of the county, and the eastern county is largely undeveloped mountain and desert landscape. Scenic resources within the Coastal Plain include bays, lagoons, coastlines, and canyons. Scenic resources within the Peninsular Range foothills include rivers and reservoirs. Scenic resources within the higher elevations of the Peninsular Range include wilderness areas; state parks; county reserves; and forest land, such as Cleveland National Forest (CNF) (County of San Diego 2011a).

3.2.1.2 Visual Character of the Proposed Project Area

The Proposed Project would primarily cross undeveloped areas, residential areas, and existing road rights-of-way and parallel existing electrical infrastructure in the unincorporated portions of the county, including the communities of Crest and Harbison Canyon. The residential areas crossed by the Proposed Project are primarily dominated by single-family homes along paved residential roads. The majority of the Proposed Project would cross undeveloped areas, some of which are adjacent to existing utility corridors, that are characterized by foothill and montane terrain, which includes coastal sage scrub and mixed chaparral vegetation communities.

The majority of the approximately 11-mile-long proposed 230 kV OH segment would cross undeveloped areas. However, the proposed 230 kV OH segment would cross paved roads at eight locations for approximately 50 feet at each crossing. Additionally, between Pole 12 and Pole 13, the proposed 230 kV OH Segment would cross an area of homes and dirt driveways for approximately 670 feet. Between Pole 38 and Pole 43, the proposed 230 kV OH segment would cross an area of homes and dirt roads interspersed among undeveloped areas for approximately 0.6 mile. The approximately 3.1-mile-long proposed 230 kV western UG segment would be installed along existing paved and dirt roads, and approximately 0.4 mile of the proposed 230 kV eastern UG segment would be installed along an existing dirt road. Approximately 230 feet of the proposed 230 kV eastern UG segment would be installed on undeveloped land.

Elevations range from 760 to 2,920 feet above sea level. The Proposed Project would cross managed preserve and forest land, including Crestridge Ecological Reserve, which is managed by the California Department of Fish and Wildlife (CDFW); land managed by the Endangered Habitats Conservancy; and CNF, which is managed by the United States (U.S.) Forest Service (USFS).

As depicted in Attachment 2-A: Detailed Route Map in Chapter 2 – Project Description, the Proposed Project would begin at SDG&E's existing Transmission Line (TL) 23021 and would extend in an underground configuration (i.e., the proposed 230 kV western underground [UG] segment) for approximately 3.1 miles. The proposed 230 kV UG segment would cross an existing SDG&E transmission corridor and would be installed underground along La Cresta Road, Mountain View Road, and private roads. At Pole 2, the proposed 230 kV western UG segment would transition to an overhead configuration (i.e., the proposed 230 kV overhead [OH] segment) and continue in that configuration for approximately 11.0 miles. The proposed 230 kV OH segment would primarily cross undeveloped areas, cross an existing SDG&E 69 kV transmission line between Poles 16 and 17, and then continue across primarily undeveloped areas. From approximately Poles 24 to 46, the proposed 230 kV OH segment would parallel an existing SDG&E 69 kV transmission line (TL625). The proposed 230 kV OH segment would parallel an existing SDG&E 500 kV transmission line (Sunrise Powerlink) from approximately Pole 48 near Japatul Road to a point north of Pole 55 where the proposed 230 kV OH segment would transition to the proposed 230 kV eastern UG segment. The proposed 230 kV eastern UG segment would continue on SDG&E land for approximately 0.5 mile and terminate at the existing Suncrest Substation.

The proposed staging yards would be located within urban, residential, and undeveloped settings. The proposed Hospital Staging Yard would be located on a parcel in the City of El Cajon. The proposed Greenfield Staging Yard would be located on a parcel in the community of Granite Hills in unincorporated San Diego County. The proposed Sweetwater Staging/Fly Yard would be located in the dirt parking lot for Loveland Reservoir. The proposed High Glen Staging Yard, proposed High Glen Fly Yard, proposed Lyons Valley Staging/Fly Yard, and proposed Swat Staging Yard would be located in an undeveloped area in unincorporated San Diego County.

3.2.1.3 Visual Character Surrounding the Proposed Project Area

Undeveloped and residential areas surround the Proposed Project. The Proposed Project would be located approximately 0.5 mile east of the City of El Cajon, an urban area with an estimated population of 102,991 people. The Proposed Project would cross the census-designated place of Alpine near its southern border. Alpine has an estimated population of 14,236 people (U.S. Census Bureau 2025). The surrounding undeveloped area is characterized by mountainous terrain near Harbison Canyon, Alpine, and Loveland Reservoir. The staging yards would be located in areas surrounded by urban, residential, and undeveloped land. The proposed Hospital Staging Yard would be located within an urban setting in the City of El Cajon. The proposed Greenfield Staging Yard would be located within the community of Granite Hills and surrounded by residences. The proposed Sweetwater Staging/Fly Yard would be surrounded by hiking trails and Loveland Reservoir. The proposed High Glen Staging Yard and High Glen Fly Yard would be primarily surrounded by undeveloped areas with a few residences in the vicinity. The proposed Lyons Valley Staging/Fly Yard and Swat Staging Yard would be surrounded by mountains and hills.

3.2.1.4 Scenic Highways and Corridors

Highways in the vicinity of the Proposed Project that are designated as County Scenic Highways by the San Diego County General Plan, designated or eligible for designation as California State Scenic Highways, or designated as National Forest Scenic Byways are described in Table 3.2-1: Scenic Highways in the Vicinity of the Proposed Project.

Table 3.2-1: Scenic Highways in the Vicinity of the Proposed Project

Highway or Road Name	Designated as a County Scenic Highway?	Designated or Eligible for Designation as a State Scenic Highway?	Designated as a National Forest Scenic Byway?	Location Compared to the Proposed Project
Sunrise Highway	No	No	Yes	The existing Suncrest Substation is located approximately 10 miles southwest of Sunrise Highway.
Interstate (I-) 8	No	Yes; Eligible for Designation	No	The proposed Hospital Staging Yard would be located approximately 620 feet west of I-8. The western terminus of the proposed 230 kV western UG segment would be located approximately 1.1 miles west of I-8. The proposed 230 kV OH segment would parallel I-8 approximately 2.5 miles south of I-8 for approximately 3.4 miles between Poles 14 and 31.
Dehesa Road	Yes	No	No	The proposed 230 kV OH segment would parallel Dehesa Road approximately 0.2 mile north of Dehesa Road for approximately 1 mile between Poles 14 and 18. The proposed 230 kV OH segment would cross Dehesa Road twice between Poles 18 and 19. The proposed Sweetwater Staging/Fly Yard would be located approximately 1.2 miles southeast of the designated portion of Dehesa Road.
Harbison Canyon Road	Yes	No	No	The proposed 230 kV OH segment would cross Harbison Canyon Road between Poles 3 and 4.
Mountain View Road	Yes	No	No	The proposed western 230 kV UG segment would be installed along Mountain View Road for approximately 0.3 mile.
La Cresta Road	Yes	No	No	The proposed western 230 kV UG segment would be installed along La Cresta Road for approximately 1.7 miles. The proposed Greenfield Staging Yard would be located approximately 0.3 mile southeast of La Cresta Road.
Japatul Road	Yes	No	No	The proposed High Glen Staging Yard would be located approximately 2.8 miles west of the designated portion of Japatul Road. The proposed High Glen Fly Yard would be located approximately 2.6 miles west of the designated portion of Japatul Road.

Highway or Road Name	Designated as a County Scenic Highway?	Designated or Eligible for Designation as a State Scenic Highway?	Designated as a National Forest Scenic Byway?	Location Compared to the Proposed Project
Lyons Valley Road	Yes	No	No	The proposed Swat Yard would be located approximately 0.3 mile southeast of Lyons Valley Road. The proposed Lyons Valley Staging/Fly Yard would be located approximately 0.2 mile south of Lyons Valley Road.

Sources: California Department of Transportation (Caltrans) 2025, California Legislative Information 2014, County of San Diego 2011b, U.S. Department of Transportation (DOT) 2024

3.2.1.5 United States Forest Service Inventoried Roadless Areas

The USFS identified certain natural landscape areas without constructed or maintained roads in the Forest Service Roadless Area Conservation Final Environmental Impact Statement (EIS) as inventoried roadless areas (IRAs). These areas are protected and managed by the USFS to preserve a roadless landscape. Some IRAs are recommended to Congress for wilderness designation while others are allocated to alternative land uses. Federally designated wilderness on USFS land is managed by the USFS to maintain its natural condition. The Final EIS for the Angeles National Forest, CNF, Los Padres National Forest, and San Bernardino National Forest Land Management Plans (LMPs) identified and evaluated 21 IRAs and other undeveloped areas within the CNF. The Proposed Project would be located approximately 3 miles west of Pine Creek Wilderness, which has approximately 485 acres located along its southwest border designated as an IRA.

United States Forest Service Scenery Management System and Scenic Integrity Objectives

The USFS's Scenery Management System identifies scenic resources, maps the resources, and assigns a value for aesthetics. Areas are given a scenic character description and Scenic Attractiveness rank based on the uniqueness of the landform, water, and vegetation patterns. Concern Levels are also determined, which are a measurement of the interest of the scenery to the viewer. From the mapped Concern Level areas, Landscape Visibility is mapped to determine what is visible from the Concern Level areas. Scenic Classes and Scenic Integrity of areas are also classified. The levels of Scenic Integrity are Very High, High, Moderate, Low, Very Low, and Unacceptable Alteration, as described in Table 3.2-2: Levels of Scenic Integrity.

Table 3.2-2: Levels of Scenic Integrity

Scenic Integrity Level	Description
Very High	Valued scenic character is intact with no or small changes to the visual character.
High	Changes/impacts are present, but they mimic the scenic character closely and thus are not evident.
Moderate	Noticeable changes/impacts are present, but the scenic character remains more prominent than the changes/impacts.
Low	Deviations begin to dominate the landscape.
Very Low	Landscape is heavily altered, and management activities dominate the landscape.
Unacceptable Alteration	Landscape appears extremely altered, and the landscape requires rehabilitation.

Sources: U.S. Department of Agriculture (USDA) 1995

Based on the inventory of scenic resources, the USFS establishes Scenic Integrity Objectives (SIOs) that represent the desired conditions for the visual landscape to be managed for and toward during the implementation of an LMP. SIOs are classified using the levels of Scenic Integrity defined in Table 3.2-2: Levels of Scenic Integrity and are used to determine the potential effects from proposed management activities and scenarios in the forest. An SIOs map accompanies a forest LMP and classifies the areas of desired Scenic Integrity across the forest. The SIO map for the CNF extends beyond the boundaries of the USFS lands. The proposed 230

kV eastern UG segment and the proposed 230 kV OH segment would cross land with a High Scenic Integrity Level for approximately 6.5 miles and land with a Moderate Scenic Integrity Level for approximately 0.4 mile. The existing Suncrest Substation is located on land with High and Moderate Scenic Integrity Levels.

3.2.1.6 Scenic Resources

Scenic resources are landscape features that are considered visually or aesthetically pleasing and contribute to the character of a community or region. Scenic resources that would be crossed by the Proposed Project are described in Table 3.2-3: Scenic Resources Crossed by the Proposed Project.

Table 3.2-3: Scenic Resources Crossed by the Proposed Project

Resource Name	Characteristics
Crestridge Ecological Reserve	Approximately 2,800-acre reserve north of the community of Crest containing riparian woodland, oak woodlands, coastal sage scrub, and chaparral habitat that support raptor species, native butterflies, and native plants.
Harbison Canyon	Gorge area at the southern end of Galloway Valley.
Loveland Reservoir	Reservoir in Alpine surrounded by foothills and mountains. Rest stop for migratory waterfowl and adjacent habitat for birds and large mammal species. Nearby hiking and riding trails for recreationists.
CNF	National forest covering approximately 460,000 acres, including chaparral, coastal sage scrub, conifer forest, and lower montane forest habitats.

Sources: CDFW 2025, County of San Diego 2011a, USDA 2025

3.2.1.7 Scenic Vistas

Scenic vistas include views through openings or corridors of the foothills, mountains, and canyons within and surrounding the Proposed Project Areas. The peaks of McGinty, Dehesa, and Sycuan are visible from the Harbison Canyon and Crest/Dehesa area. Many of the highways and local roads in the Proposed Project Area have views of the foothills, mountains, and canyons.

3.2.1.8 Light and Glare Conditions

Existing sources of light and glare are primarily confined to residential areas that would be crossed by the Proposed Project. Existing sources of light and glare include streetlights along roadways, lights in parking lots, and interior lights in residential homes.

3.2.1.9 Viewers and Visual Sensitivity

Accepted visual assessment methods establish sensitivity levels as a measure of public concern for changes to scenic quality. Viewer sensitivity (i.e., one of the criteria used to evaluate visual impact significance) is defined as the extent to which the viewing public would notice or experience a change in visual quality. Viewer sensitivity is based on a viewer's ability to perceive the landscape and is affected by their activity on the landscape. Viewer sensitivity can be divided into high, moderate, and low categories. Factors considered in assigning a sensitivity level include viewer activity, viewing duration, viewing distance, adjacent land use, and special management or planning designation. Visual sensitivity would vary with the type of users.

Viewer groups consist predominantly of motorists, residents, and recreational area users near the Proposed Project.

Motorists constitute the largest viewer group and include local travelers who are familiar with the visual setting (e.g., residents traveling to and from work) and regional travelers (e.g., recreationists who use area roads on a less regular basis). Most motorists would experience brief, elevated- to normal-angle views of the Proposed Project. The sensitivity of this viewer group is considered low for the proposed 230 kV OH segment due to the short exposure of views experienced while traveling along the local roadways and the presence of existing utility infrastructure that would parallel the 230 kV OH segment for approximately 5.8 miles. Once constructed, the proposed 230 kV western and eastern UG segments would not be visible.

The second viewer group consists of residents in nearby communities. Residential views tend to be frequent and long in duration; therefore, the sensitivity of this viewer group is considered moderate to high for the proposed 230 kV OH segment. Once constructed, the proposed 230 kV western and eastern UG segments would not be visible.

The third viewer group is composed of recreationists using recreational areas, parks, and trails in the vicinity of the Proposed Project for activities such as hiking, fishing, and mountain biking. Recreationists' views range from relatively brief to longer in duration. For instance, the Proposed Project may be briefly visible from nearby hiking trails where changes in elevation and trail direction obscure views of the Proposed Project for the majority of the hiking trail. The Proposed Project may be viewed for longer durations from nearby hiking trails where hikers travel in a direction parallel to or facing the Proposed Project at an elevation where views are unobscured by the surrounding mountains. The sensitivity of this viewer group is considered moderate to high for the proposed 230 kV OH segment due to the potential for impeded views of the natural landscape for extended durations. Once constructed, the proposed 230 kV western and eastern UG segment would not be visible.

3.2.1.10 Representative Viewpoints

Selection of representative viewpoints began with a desktop review of Proposed Project maps and geographic information system (GIS) data. Through the desktop study, 37 representative viewpoints were selected to characterize the existing visual condition and to assess potential use in visual simulations. Photographs were obtained from the 37 locations on July 25, 2025 using a digital single-lens reflex camera with a 50-millimeter lens, which represents a horizontal viewing angle of 40 degrees. All points are publicly accessible and depicted in Figure 3.2-1: Representative Photograph and Key Observation Point Locations.

3.2.1.11 Key Observation Points

Twelve of the 37 representative viewpoints were identified as Key Observation Points (KOPs), representing viewpoints where the Proposed Project would be most visible to the public or private residences. Locations of the KOPs are depicted in Figure 3.2-1: Representative Photograph and Key Observation Point Locations, descriptions of the existing visual setting of the KOPs are provided in Table 3.2-4: Existing Setting of the Key Observation Points, and photographs of the KOPs are provided in Attachment 3.2-A: Representative and Key Observation Point Photographs.

Table 3.2-4: Existing Setting of the Key Observation Points

KOP	Viewer Group	Existing Setting of the View
KOP 1 – Sequan Truck Trail	Residential	Japatul Road is paralleled by a barely perceptible distribution line in the foreground. Hills with scrub/brush vegetation are in the middle ground. Residential homes across the hilltops are intermixed with trees in the middle ground. Mountains and sky are in the background.
KOP 2 – Nightwatch Way	Residential	Scrub/brush vegetation is in the foreground. Hills with scrub/brush vegetation are in the middle ground. An SDG&E 69 kV transmission line (i.e., structures and conductor) running east to west on top of the hill is in the middle ground. Mountains and sky are in the background.
KOP 3 – Japatul Road and Dehesa Road	Motorist	Japatul Road and scrub/brush vegetation are in the foreground and extend into the middle ground. A bluff face where the road cuts through the hill is in the middle ground. A wood distribution pole on the north side of Japatul Road and a distribution line bisecting the sky north to south are in the middle ground. Mountains with homes on the top are in the middle ground. Mountains and sky are in the background.
KOP 4 – California Riding and Hiking Trail (CRHT)	Recreationist	Scrub/brush vegetation and a short wire fence are in the foreground. Hills with SDG&E 69 kV transmission line structures and conductor traveling southwest through a valley are in the middle ground. Hill and sky are in the background.
KOP 5 – CRHT	Recreationist	A dirt trail, short wire fence, and brush are in the foreground. Hills and SDG&E 69 kV transmission line structures and conductor traveling northwest to southeast are on top of the hills in the middle ground. Mountains and sky are in the background.
KOP 6– CRHT	Recreationist	Scrub/brush vegetation is in the foreground. Hills with SDG&E 69 kV transmission line structures and conductor traveling southwest through a valley and up the hills are in the middle ground. Hill and sky are in the background.
KOP 7 – Loveland Reservoir Trail	Recreationist	Scrub/brush vegetation is in the foreground. Hills with SDG&E 69 kV transmission line structures and conductor traveling northwest to southeast on top of the hills are in the middle ground. SDG&E 69 kV transmission line structures, mountains, and sky are in the background.
KOP 8 – Japatul Road	Motorist	Japatul Road, a short wire fence, and scrub/brush are in the foreground. A wood distribution pole and line and hills with scrub/shrub vegetation are in the middle ground. SDG&E 69 kV transmission line structures and conductor on the tops of hills are in the middle ground. Mountains and sky are in the background. Lattice steel towers (LSTs) are barely perceptible on the tops of mountains in the background.
KOP 9 – CRHT	Recreationist	Scrub/brush vegetation, Japatul Road, and a distribution pole and line are in the foreground. The middle ground includes a dirt trail and hills with SDG&E 69 kV transmission line structures and conductor traveling northwest to southeast on top of the hills. Mountains and sky are in the background. LSTs are barely perceptible on the tops of mountains in the background.

KOP	Viewer Group	Existing Setting of the View
KOP 10 – Japatul Road	Motorist	Japatul Road, a wood distribution pole and line, and scrub/brush vegetation are in the foreground. Trees, a dirt trail, and hills are in the middle ground. SDG&E 69 kV transmission line structures and conductor travel northwest to southeast over the hills in the middle ground. Mountains and sky are in the background. LSTs are barely perceptible on the tops of mountains in the background.
KOP 11 – Japatul Road	Residential	Dirt roads, scrub/brush vegetation, and an SDG&E 69 kV transmission line structure and conductor are in the foreground. Hills are in the middle ground. The tops of hills and sky are in the background.
KOP 12 – Japatul Road	Motorist	Japatul Road and scrub/brush vegetation are in the foreground. Hills and SDG&E 69 kV transmission line structures and conductor are in the middle ground. Hills, mountains, and sky are in the background.

Four KOPs—KOPs 2, 3, 7, and 10—were selected to develop the visual simulations depicted in Attachment 3.2-B: Visual Simulations. The four KOPs were identified as views where residential, motorist, or recreationist viewers would be most likely to notice the Proposed Project.

3.2.2 Regulatory Setting

3.2.2.1 Federal

Southern California National Forests Land Management Plan

Each national forest, grassland, and prairie managed by the USFS has an individual LMP to guide specific uses such as timber harvest, primitive recreation, or rare plant protection. As described in Section 3.2.1 Environmental Setting, aesthetic considerations inform USFS management of forest lands, and the USFS implements the Scenery Management System, which includes the establishment of SIOs, to manage forest lands to achieve the desired scenic conditions.

Part 2: Cleveland National Forest Strategy of the Southern California National Forests LMP divides CNF into a series of geographical units referred to as Places. Each Place has its own visual and cultural impression of landscape attributes. The Proposed Project would cross the Sweetwater Place, which is characterized as a transition zone between the metropolitan area and undeveloped land in east San Diego County. The Sweetwater Place supports oak woodlands, chaparral, and riparian vegetation. The LMP identifies the undeveloped character of the Sweetwater Place and unobstructed panoramic views as attributes to be preserved and managed by the USFS over time.

Part 2 also identifies the following strategy for landscape character that is relevant to the Proposed Project:

- LM 3 – Landscape Character. Maintain the character of National Forest System lands in order to preserve their intact nature, valued attributes, and open space.
    - Maintain the integrity of the expansive, unencumbered landscapes and traditional cultural features that provide the distinctive character of places.
    - Plan, design, and improve infrastructure along scenic travel routes to meet scenic integrity objectives.

Part 3: Design Criteria for Southern California National Forests contains the following Aesthetic Management Standards that are relevant to the Proposed Project:

- S9: Design management activities to meet the Scenic Integrity Objectives (SIOs) shown on the Scenic Integrity Objective Map.
- S10: Scenic Integrity Objectives will be met with the following exceptions:
    - Minor adjustments not to exceed a drop of one SIO level is allowable with the Forest Supervisor’s approval.

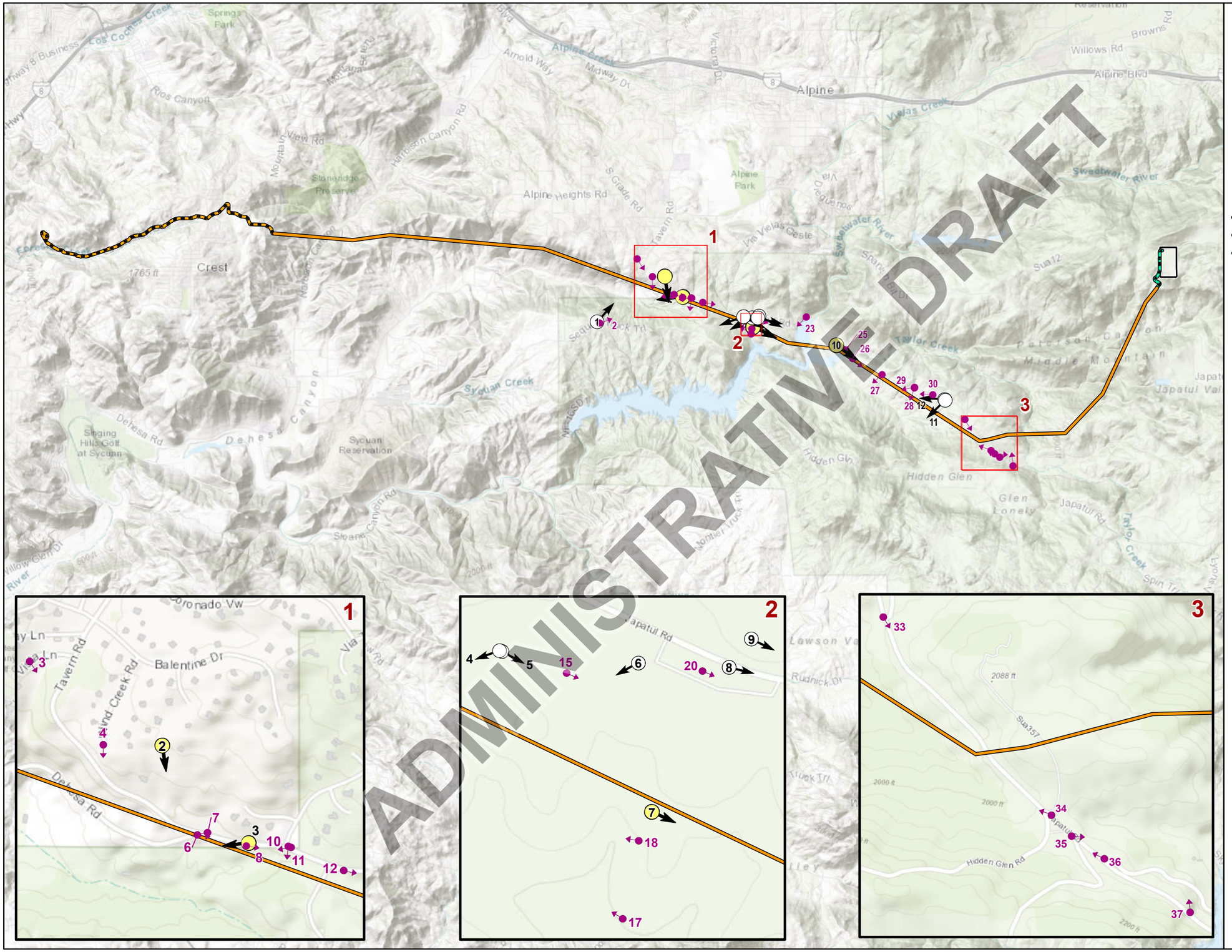

Figure 3.2-1:
Representative Photograph and Key Observation Point Locations

Suncrest
230 Kilovolt Loop-In Project

- Representative Photo
- Key Observation Point
- Simulated Key Observation Point
- Existing Suncrest Substation
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment

SDGE

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- Temporary drops of more than one SIO level may be made during and immediately following project implementation providing they do not exceed three years in duration.

Forest Service Manual 2300 – Recreation, Wilderness, and Related Resource Management

Chapter 2380 – Landscape Management of Forest Service Manual 2300 outlines the statutory authorities and federal regulations for the management of landscape aesthetics and scenery within the National Forest System. The USFS carries out the following aesthetics management policies described in Section 2380.3:

1. Inventory, evaluate, manage, and, where necessary, restore scenery as a fully integrated part of the ecosystems of National Forest System lands and of the land and resource management and planning process.

2. Employ a systematic, interdisciplinary approach to scenery management to ensure the integrated use of the natural and social sciences and environmental design.

3. Ensure scenery is treated equally with other resources.

4. Apply scenery management principles routinely in all National Forest System activities.

3.2.2.2 State

State Scenic Highway Program

The Caltrans State Scenic Highway Program is aimed at preserving and enhancing the scenic qualities of designated state highways throughout California. Under this program, certain highways are recognized for their outstanding visual, cultural, and recreational significance, and designated as State Scenic Highways. The state Legislature determines which highways are eligible for designation. Highways that are eligible can become officially designated as a State Scenic Highway by the Caltrans Director once the local governing body applies to Caltrans for scenic highway approval and adopts a Corridor Protection Program. These highways are subject to special regulations and guidelines aimed at protecting their scenic and aesthetic values. The program seeks to balance transportation needs with the preservation of scenic resources, encouraging sensitive highway design, landscaping, and maintenance practices to minimize visual impacts.

3.2.2.3 Local

3.2.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan contains the following policies that are relevant to aesthetics:

- **Policy COS-11.1 Protection of Scenic Resources.** Require the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.

- **Policy COS-11.5 Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

The San Diego County General Plan identifies scenic roads as part of the County Scenic Highway System. According to the San Diego County General Plan Update Environmental Impact Report, the County Scenic Highway System list serves as a source for identifying resources. Due to a lack of funding, few corridor studies have been initiated, and no routes have been officially designated as a County Scenic Highway (County of San Diego 2011a).

Alpine Community Plan

The Draft Alpine Community Plan prepared in 2020 is an update to the plan adopted in 1979. A final updated Alpine Community Plan has not been published. The Draft Alpine Community Plan contains the following policy that is relevant to aesthetics:

- **LU-8.1** Protect scenic vistas/view corridors in the following locations:

  - I-8 looking north through Peutz Valley to El Capitan Reservoir
  - I-8 looking south through Peutz Valley to Harbison Canyon/Alpine
  - East and west views of Viejas Mountain

3.2.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals and policies that pertain to the Proposed Project concerning aesthetics were identified.

3.2.3 Impact Analysis and Mitigation Measures

3.2.3.1 Analysis Methodology

Impacts to aesthetics were determined by comparing the baseline visual setting to the potential visual change introduced by the Proposed Project. Additionally, research on State Scenic Highways and scenic vistas through publicly available mapping and local plans informed the impact analysis. Twelve photographs were selected as KOPs and represent viewpoints where the Proposed Project would be most visible to the public or private residential views; four KOPs—KOPs 2, 3, 7, and 10—were selected to develop the visual simulations depicted in Attachment 3.2-B: Visual Simulations. The four KOPs were identified as views where residential, motorist, or recreationist viewers would be most likely to notice the Proposed Project. Visual change at these KOPs is also summarized in Table 3.2-5: Proposed Project Visual Change at Select Key Observation Points. Although the number of private residential viewers with potentially impacted views is relatively small as compared to motorists, a discussion of impacts to private residential views is included.

Table 3.2-5: Proposed Project Visual Change at Select Key Observation Points

Key Observation Point and Location	Proposed Project Component	Viewer Groups	Viewer Type	Viewer Sensitivity Rating	Existing Setting of the View	Proposed Project-related Change and Visual Effect
KOP 2 – Nightwatch Way	Proposed 230 kV OH Segment	Residential	Private	High	Scrub/brush vegetation is in the foreground. Hills with scrub/brush vegetation are in the middle ground. An existing SDG&E 69 kV transmission line with wood poles running east to west on top of the hill is in the middle ground. Mountains and sky are in the background.	The Proposed Project would install one new tangent tubular steel pole (TSP) (Pole 20) and new conductor in the foreground of the view. The Proposed Project would represent a noticeable visual change in the landscape. The transmission structure would reduce the visual coherence of the hills by introducing a steel, vertical element. The weathered steel would reduce the contrast against the hill in the foreground to middle ground. The conductor would be barely perceptible against the hills. The viewers in the area are residential and are likely to be sensitive to the change.
KOP 3 – Japatul Road and Dehesa Road	Proposed 230 kV OH Segment	Motorist	Public	Low	Japatul Road and scrub/brush vegetation are in the foreground and extend into the middle ground. A bluff face where the road cuts through the hill is in the middle ground. A wood distribution pole on the north side of Japatul Road and a distribution line bisecting the sky north to south are in the middle ground. Mountains with homes on the top are in the middle ground. Mountains and sky are in the background.	The Proposed Project would install one new tangent TSP (Pole 20) and new conductor in the middle ground of the view. The Proposed Project would represent a noticeable visual change in the landscape as overhead transmission lines are currently not present in the view. The transmission structure would reduce the visual coherence of the distant mountain views and sky by introducing a steel, vertical element. From KOP 3, the transmission structure would appear as the tallest feature in the view. The conductor would be perceptible and introduce horizontal energy infrastructure over the trees, scrub/shrub vegetation, and bluff south of Japatul Road. The viewers in the area are motorists and are not likely to be sensitive to the change due to the short duration of the view.

Key Observation Point and Location	Proposed Project Component	Viewer Groups	Viewer Type	Viewer Sensitivity Rating	Existing Setting of the View	Proposed Project-related Change and Visual Effect
KOP 7 – Loveland Reservoir Trail	Proposed 230 kV OH Segment	Recreationist	Public	Moderate	Scrub/brush vegetation is in the foreground. The middle ground shows hills with existing SDG&E 69 kV transmission line structures and conductor traveling northwest to southeast on top of the hills. Existing SDG&E 69 kV transmission line structures, mountains, and sky are in the background.	The Proposed Project would install new tangent TSPs and new conductor to the north of and parallel to the existing SDG&E 69 kV transmission line in the middle ground of the view. The Proposed Project would represent a noticeable visual change in the landscape. Although the change would be noticeable, given the presence of existing utility structures and conductor, it would not substantially alter the overall character of the landscape setting. The viewers in the area are recreationists who would notice the change, but they are less likely to be sensitive to the change due to the presence of existing utility infrastructure.
KOP 10 – Japatul Road	Proposed 230 kV OH Segment	Motorist	Public	Low	Japatul Road, a wood distribution pole and line, and scrub/brush vegetation are in the foreground. Trees, a dirt trail, and hills are in the middle ground. SDG&E 69 kV transmission line structures and conductor travel northwest to southeast over the hills in the middle ground. Mountains and sky are in the background. LSTs are barely perceptible on top of the mountains in the background.	The Proposed Project would install new tangent TSPs and new conductor north of and parallel to the existing SDG&E 69 kV transmission line in the middle ground of the view. The Proposed Project represents a noticeable visual change in the landscape. Although the change would be noticeable, given the presence of existing utility structures and conductor, it would not substantially alter the overall character of the landscape setting. The viewers in the area are motorists and are not likely to be sensitive to the change due to the short duration of the view.

3.2.3.2 Applicant-Proposed Measures

The following applicant-proposed measures (APMs) would be implemented for the Proposed Project:

- **APM AES-01:** When construction has been completed, all temporary work areas will be restored to near pre-construction conditions in accordance with landowner agreements, in order to minimize potential visual contrast with the surrounding landscape setting.
- **APM AES-02:** Construction activities will be kept as clean and inconspicuous as practical. Where practical, construction storage and staging will be screened from close-range residential views with opaque fencing.
- **APM AES-03:** Non-specular conductors will be installed along the proposed 230 kV OH segment to minimize the reflectivity and general visibility of the wires.
- **APM AES-04:** Any required lighting will be limited to individual work areas.

3.2.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For aesthetics, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Have a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- In nonurbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

3.2.3.4 Impact Analysis

3.2.3.4.1 Impact AES-01: Would the project have a substantial adverse effect on a scenic vista?

Construction

Less-than-Significant Impact. For the purposes of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. Additionally, the Draft Alpine Community Plan identifies scenic vistas/view corridors in the following locations:

- I-8 looking north through Peutz Valley to El Capitan Reservoir;

- I-8 looking south through Peutz Valley to Harbison Canyon/Alpine; and
- East and west views of Viejas Mountain.

The Proposed Project would not adversely impact the views of scenic vistas/view corridors identified in the Draft Alpine Community Plan for the following reasons:

- Construction of the Proposed Project would be located south of I-8 and thus would not be visible while looking north from I-8 through Peutz Valley.

- Construction of the proposed 230 kV OH segment would be located approximately 3.2 miles south of the portion of I-8 where there are south views of Harbison Canyon and Alpine. Mountains would obscure the majority of the proposed 230 kV OH segment poles in this view, and the conductor would be barely perceptible at this distance. If any poles are visible, it would likely be limited to one pole due to the topography, and motorists on I-8 would have distant and brief views of the pole.

- Construction of the proposed 230 kV OH segment would be the closest Proposed Project component to Viejas Mountain and would be located approximately 4.8 miles south of Viejas Mountain. The Proposed Project would not be located within the same view as east or west views of the mountain.

Other scenic vistas in the area of the Proposed Project include views along or through openings or corridors of foothills, mountains, and canyons. During construction of the Proposed Project, visual impacts would include the presence of workers, construction equipment, and vehicles associated with the installation of the new transmission line structures, new overhead conductors and underground cables, and modifications at the existing Suncrest Substation.

To varying degrees, construction activity would be noticeable to motorists, recreationists, and local residents. Motorists would have brief views of construction, and therefore motorist views of scenic vistas would not be substantially affected by construction of the Proposed Project. In the area of Loveland Reservoir, construction equipment and activities such as pole installation and conductor installation would introduce colors and shapes that contrast with the surroundings hills. However, construction of the Proposed Project and the proposed Sweetwater Staging/Fly Yard would not substantially adversely affect scenic vistas in the area of Loveland Reservoir. Construction would be confined to delineated work areas, and construction across multiple work areas would be unlikely to occur simultaneously within a single view to the extent that the construction activities would obscure most of a scenic vista. Adverse effects from construction would be temporary, lasting the duration of construction at that location, and the proposed Sweetwater Staging/Fly Yard would be most noticeable to recreationists arriving at and leaving from the public parking lot for Loveland Reservoir. Some residences located along or above La Cresta Road and Dehesa Road or within neighborhoods in the community of Alpine would have views of the construction that would affect views of scenic vistas. For instance, in the community of Alpine, primarily residents with homes at the end of residential streets with south-facing views of Dehesa Road or Japatul Road would be able to view construction from their homes. Based on a review of mapping, approximately 50 homes would have south-facing views toward Dehesa Road or Japatul Road and views of construction. As previously described, construction across multiple work areas would be unlikely to occur simultaneously within a

single view to the extent that construction activities would obscure most of a scenic vista, and impacts to the private residential views of scenic vistas during construction would be temporary. Further, with the implementation of the APMs described in the following paragraph, construction would not substantially adversely impact views of scenic vistas.

Implementation of APMs would reduce impacts to scenic vistas during construction. SDG&E would implement APM AES-01 to restore temporary work areas to near pre-construction conditions to reduce the impact from the temporary visual change. Further, SDG&E would implement APM AES-02, which would require clean and inconspicuous construction areas to the extent practicable and screen staging yards from close-range residential views. With the implementation of APMs AES-01 and AES-02, the impact to scenic vistas during construction would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. Once constructed, the Proposed Project would not adversely affect scenic vistas identified in the Draft Alpine Community Plan. As previously described, due to the location of the Proposed Project, the Proposed Project would not appear in views looking north from I-8 through Peutz Valley or in east or west views of Viejas Mountain. When looking south from I-8 through Peutz Valley towards Harbison Canyon and Alpine, mountains would obscure the majority of the Proposed Project poles in this view, and the conductor would either be obscured by mountains or barely perceptible since it would be located approximately 3.2 miles south of I-8. If any poles are visible in the view, it would likely be limited to one pole due to the topography, and motorists on I-8 would have distant and brief views of the pole.

The Proposed Project would not substantially adversely affect other scenic vistas once constructed. The majority of the Proposed Project would parallel an existing transmission corridor, including the portion of the Proposed Project that would cross the area of Loveland Reservoir. As depicted in the visual simulation from KOP 7 in Attachment 3.2-B: Visual Simulations, the presence of existing utility infrastructure would reduce the Proposed Project's impact on the scenic vista that can be viewed from the Loveland Reservoir Trail. Similarly, as depicted in the visual simulation from KOP 10 in Attachment 3.2-B: Visual Simulations, the presence of existing infrastructure would reduce the Proposed Project's impact on the motorist's view of the scenic vista. Further, motorists driving along Japatul Road near Loveland Reservoir would have glance views that would be short in duration. Weathered steel poles would reduce the contrast of the poles against the hills and mountains, and implementation of APM AES-03, which requires installing non-specular conductors along the proposed 230 kV OH segment, would minimize the reflectivity and general visibility of the wires.

Some private residential views of scenic vistas would be adversely affected by the Proposed Project, as depicted in the visual simulation from KOP 2 in Attachment 3.2-B: Visual Simulations. The adverse effect to private residential views from KOP 2 would not be substantial due to the structure appearing below the existing elevation of the background hills from KOP 2 and the pole and conductor appearing barely perceptible against the hills. The weathered steel pole would reduce the contrast against the hills in the background compared to the grey steel of a typical 230 kV pole. In the community of Alpine, primarily residents with homes at the end of residential streets with south-facing views toward Dehesa Road or Japatul Road would be able to view the Proposed Project from their homes. Based on a review of mapping, approximately 50

homes in Alpine would have south-facing views toward Dehesa Road or Japatul Road and views of the Proposed Project. The proposed 230 kV OH segment would be located approximately 0.1 to 0.3 mile from these homes, and these homes would likely only have views of an estimated one to three poles in a single view. Homes located on Corte Dorado Espuela in Alpine may be able to view several of the proposed 230 kV OH segment poles along with mountain views as the alignment travels southeast in the area of Loveland Reservoir. Views of the poles would be distant, with the closest pole located approximately 0.3 mile from Corte Dorado Espuela and each successive pole traveling southeast along the alignment located even farther from Corte Dorado Espuela. It is estimated that five homes on Corte Dorado Espuela could have such views. Weathered steel poles would reduce the contrast against the hills and mountains, and non-specular conductors would reduce the general conductor visibility.

Motorists would have brief, distant, and changing views (as they are in transit) of scenic vistas and the existing Suncrest Substation. Primary viewers of the existing Suncrest Substation are motorists on Japatul Road, and a motorist or passenger traveling on Japatul Road would have to turn their gaze to the north to briefly view the existing Suncrest Substation or pull over on the shoulder of Japatul Road at a location where the existing Suncrest Substation is visible. The existing Suncrest Substation is not within a motorist's field of vision when looking straight ahead to the east or west while driving on Japatul Road. The proposed modifications to the existing Suncrest Substation would include the installation of a 500/230 kV transformer bank and associated tertiary reactors, circuit breakers, disconnects, and communication equipment, as well as construction of a 230 kV bay. The substation modifications would be conducted within the existing substation fence line. The new equipment would have similar heights, colors, and textures as the existing equipment within the existing Suncrest Substation and thus would not alter the visual appearance of the existing Suncrest Substation. The substation modifications would not result in an appreciable change to the motorists' brief, distant, and changing views of the existing Suncrest Substation.

Although the Proposed Project would adversely affect scenic vistas, it would not substantially adversely affect scenic vistas because the majority of the Proposed Project would parallel existing transmission infrastructure or occur within the existing Suncrest Substation fence line; most residential viewers would have views of a limited number of poles; residential viewers that can view several poles would have distant views; and motorist views of the Proposed Project and a scenic vista would be of short duration. As a result, the impact to scenic vistas would be less than significant.

3.2.3.4.2 Impact AES-02: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Construction, Operations and Maintenance

No Impact. Construction and O&M of the Proposed Project would not take place within a State Scenic Highway. While I-8 is eligible for designation as a State Scenic Highway, no highways designated as such are located in the vicinity of the Proposed Project. The proposed Hospital Staging Yard would be located approximately 620 feet west of I-8. The western terminus of the proposed 230 kV western UG segment would be located approximately 1.1 miles west of I-8.

The proposed 230 kV OH segment would parallel I-8 approximately 2.5 miles south of I-8 for approximately 3.4 miles between Poles 14 and 31. As a result, no impact would occur.

3.2.3.4.3 Impact AES-03: In nonurbanized area, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Construction

Less-than-Significant Impact. The majority of the Proposed Project construction would occur in non-urbanized areas, as described in Section 3.2.1.2 Visual Character of the Proposed Project Area. The Proposed Project would primarily cross undeveloped areas, some of which contain utility corridors, and are characterized by foothill and montane terrain. Primary viewer groups with public views in the non-urbanized areas include motorists and recreationists. Viewers driving or walking through public streets in residential areas may also be able to view Proposed Project construction. During construction of the Proposed Project, visual impacts would include the presence of workers, construction equipment, and vehicles associated with the installation of the proposed 230 kV transmission line structures, new overhead conductors and underground cables, and modifications at the existing Suncrest Substation. To varying degrees, construction activity would be noticeable to motorists, recreationists, and viewers in residential areas.

Ground disturbance would create new exposed soil areas, which would create visual contrast. SDG&E would implement APM AES-01 to restore temporary work areas to near pre-construction conditions to reduce the impact from the temporary visual change. Further, SDG&E would implement APM AES-02, which would require clean and inconspicuous construction areas to the extent practicable and screening of staging yards from close-range residential views.

The Proposed Project would cross lands classified by the USFS as having High or Moderate Scenic Integrity. Construction would be temporary, and the majority of construction on High or Moderate Scenic Integrity lands would occur in close proximity to an existing utility corridor and within the fence line of the existing Suncrest Substation. As a result, construction would not substantially adversely impact the existing visual character or quality of public views on CNF land. With the implementation of APMs AES-01 and AES-02, the impact to the existing visual character or quality of public views would be less than significant.

The proposed Hospital Staging Yard would be located in an urban area zoned as Mixed Use, Office Professional within the City of El Cajon. No zoning or other regulations governing scenic quality were identified for the City of El Cajon that are applicable to the Proposed Project. As a result, the Proposed Project would not conflict with applicable zoning or other regulations governing scenic quality within an urbanized area and therefore would have no impact.

Operations and Maintenance

Less-than-Significant Impact. The Proposed Project would not introduce a lasting visual change in an urbanized area as the proposed Hospital Staging Yard in the City of El Cajon would

be temporary and used only for the duration of construction. The Proposed Project would primarily cross undeveloped areas, some of which contain utility corridors and are characterized by foothill and montane terrain. Primary viewer groups with public views in the non-urbanized areas include motorists and recreationists. The following is a discussion of the Proposed Project's impact to the existing visual character or quality of public views in non-urbanized areas.

For most views of the Proposed Project, residential, motorist, and/or recreationist viewer groups are not likely to be sensitive to the change or are less likely to be sensitive to the visual change introduced by the Proposed Project due to the short duration of the view, the degree to which the proposed facilities blend into background features, and/or presence of existing utility infrastructure. Public views from KOPs 3, 7, and 10 demonstrate instances of low to moderate viewer sensitivity. Private residences with direct, prolonged views of the Proposed Project (e.g., the view from KOP 2) are more likely to be sensitive to the visual change.

Residents with views from KOP 2 are likely to notice and be sensitive to the visual change introduced by the Proposed Project due to the prolonged duration of their views. However, KOP 2 represents a private view. Views experienced from public roads and sidewalks in residential neighborhoods would constitute public views experienced from publicly accessible vantage points. While driving or walking on residential roads, houses, trees, and shrubbery would often obscure views of the Proposed Project. From locations in neighborhoods in Alpine where houses or vegetation do not obscure views, the Proposed Project would be visible. For instance, a motorist or pedestrian facing south at the end of Hawks Vista Lane, Wind Creek Road, or Nightwatch Way in the community of Alpine could view the Proposed Project. Weathered steel would reduce the visual contrast of the poles against the hills and mountains, and non-specular conductors would minimize the general visibility of the wires.

As depicted in the visual simulation from KOP 3 in Attachment 3.2-B: Visual Simulations, the Proposed Project would be noticeable to motorists and introduce new transmission infrastructure to the view where it is currently not present. The transmission structure would reduce the visual coherence of the distant mountain views and sky by introducing a steel, vertical element. From KOP 3, the transmission structure would appear as the tallest feature in the view. The conductor would be perceptible against the sky and introduce horizontal energy infrastructure over the trees, scrub/shrub vegetation, and bluff south of Japatul Road. However, the Proposed Project would not significantly degrade the visual character or quality of the view from KOP 3. Implementation of APM AES-03 would require non-specular conductors along the proposed 230 kV OH segment to minimize the reflectivity and general visibility of the wires. Further, motorists would be the primary viewer group at this KOP location. Motorists would be less sensitive to the visual change because their views of the Proposed Project would be of short duration as they travel on Japatul Road.

Recreationists at the Loveland Reservoir Trail would notice the change from the Proposed Project (depicted in the visual simulation from KOP 7 in Attachment 3.2-B: Visual Simulations), but the recreationists are less likely to be sensitive to the change due to the presence of existing utility infrastructure, installation of weathered steel poles along the proposed 230 kV OH segment, and installation of non-specular conductors along the proposed 230 kV OH segment in accordance with APM AES-03. The Proposed Project would not significantly degrade the visual

character or quality of the view from KOP 7 due to the existing utility infrastructure in the area. The Proposed Project would involve installing one parallel 230 kV transmission line, resulting in a small, incremental change to the landscape that would not be substantial to viewers. The proposed 230 kV transmission line would have a less than considerable contribution to a cumulative visual impact when viewed with the existing line.

As depicted in the visual simulation from KOP 10 in Attachment 3.2-B: Visual Simulations, the Proposed Project would be noticeable to motorists, but the motorists are less likely to be sensitive to the change due to the short duration of the view. Non-specular conductors would be installed to minimize the reflectivity and general visibility of the wires in accordance with APM AES-03. The Proposed Project would not significantly degrade the visual character or quality of the view from KOP 10 due to the existing utility infrastructure. The Proposed Project would involve installing one parallel 230 kV transmission line, resulting in a small, incremental change to the landscape that would not be substantial to viewers. The proposed 230 kV transmission line would have a less than considerable contribution to a cumulative visual impact when viewed with the existing line.

Although the proposed 230 kV transmission line would cross lands classified by the USFS as having High Scenic Integrity, the proposed 230 kV transmission line would parallel existing utility infrastructure for approximately 5.8 miles of the approximately 6.5-mile-long crossing. As previously described, any cumulative visual impacts from the Proposed Project combining with the visual impacts from existing utility infrastructure would be incremental, and the proposed 230 kV transmission line would have a less than considerable contribution to a cumulative visual impact when viewed with the existing line. As a result, the Proposed Project would not substantially adversely impact the existing visual character or quality of public views on CNF land.

The proposed modifications to the existing Suncrest Substation would include the installation of a 500/230 kV transformer bank and associated tertiary reactors, circuit breakers, disconnects, and communication equipment, as well as construction of a 230 kV bay. The substation modifications would be conducted within the existing substation fence line. The new equipment would have similar heights, colors, and textures as existing equipment within the existing Suncrest Substation and thus would not alter the visual appearance of the existing Suncrest Substation. Primary viewers of the existing Suncrest Substation are motorists on Japatul Road, who have brief, changing, and distant views of the existing Suncrest Substation. Further, a motorist or passenger traveling on Japatul Road would have to turn their gaze to the north to briefly view the existing Suncrest Substation or pull over on the shoulder of Japatul Road at a location where the existing Suncrest Substation is visible. The existing Suncrest Substation is not within a motorist's field of vision when looking straight ahead to the east or west while driving on Japatul Road. The modifications at the existing Suncrest Substation would not significantly degrade the visual character or quality of public views.

The Proposed Project would not substantially degrade, the existing visual character and quality of public views. Motorists and pedestrians using residential roads with views of the Proposed Project are anticipated to be relatively few. Motorist views of the Proposed Project would be in short duration, and the Proposed Project would parallel existing transmission infrastructure in the Loveland Reservoir recreational area. The addition of the proposed 230 kV transmission line

would constitute an incremental change and would result in a less-than-considerable contribution to a cumulative visual impact when viewed with the existing line. Weathered steel poles would reduce the visual contrast against the hills and mountains and implementation of APM AES-03 would require non-specular conductors along the proposed 230 kV OH segment to minimize the reflectivity and general visibility of the wires. Modifications to the existing Suncrest Substation would occur within the fence line. As a result, the overall impact to the existing visual character or quality of public views would be less than significant.

3.2.3.4.4 Impact AES-04: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction

Less-than-Significant Impact. Glare occurs when a high degree of contrast is evident between bright and dark areas in a field of view, making it difficult for the human eye to adjust to differences in brightness. Glare from construction equipment could occur depending on the time of day and the position of the viewer relative to the construction equipment. Such glare would be transient and ephemeral. Night work is not anticipated to be necessary but could be required in limited circumstances. For construction activities conducted at night, portable temporary lighting would be required. Implementation of APM AES-04 would reduce light escape by directing lighting at the individual work areas. As a result, impacts from light or glare would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. Non-specular conductors would be installed as part of the Proposed Project to reduce reflectivity in accordance with APM AES-03. In addition, the color of the TSPs would be weathered steel and thus diffuse potential glare. Aeronautical obstruction lighting is not anticipated to be implemented as no structures would exceed 200 feet above ground level, and the Proposed Project would not be a new source of light. Routine maintenance of the proposed 230 kV transmission line is expected to require approximately one trip per year by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. Maintenance would not introduce new light and any glare from the trucks would be transient and ephemeral. As a result, impacts from light or glare would be less than significant.

3.2.4 References

California Legislative Information. 2014. Streets and Highways Code – SHC. Online. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=SHC&division=1.&title=&part=&chapter=2.&article=2.5. Site visited November 6, 2025.

Caltrans. 2025. California State Scenic Highway. Online. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Site visited April 22, 2025.

CDFW. 2025. Crestridge Ecological Reserve. Online. https://wildlife.ca.gov/Lands/Places-to-Visit/Crestridge-ER. Site visited April 18, 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

County of San Diego. 2011a. San Diego County General Plan Update EIR 2.1 Aesthetics. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/docs/BOS_Aug2011/EIR/FEIR_2.01_-_Aesthetics_2011.pdf. Site visited April 18, 2025.

County of San Diego. 2011b. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html. Site visited April 22, 2025.

County of San Diego. 2020. Alpine Draft Community Plan County of San Diego. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 7, 2025.

Office of the Law Revision Counsel. 2025. United States Code Title 23 Section 162. Online. https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title23-section162&num=0&edition=prelim. Site visited April 22, 2025.

U.S. Census Bureau. 2025. QuickFacts. Online. https://www.census.gov/quickfacts/fact/table/US/PST045224. Site visited April 18, 2025.

U.S. DOT. 2024. Scenic Byways and Federal Lands Map. Online. https://hepgis-usdot.hub.arcgis.com/apps/usdot::scenic-byways-and-federal-lands-map/explore. Site visited April 22, 2025.

USDA. 1995. Landscape Aesthetics. Online. https://blmwyomingvisual.anl.gov/docs/Landscape%20Aesthetics%20(AH-701).pdf. Site visited April 28, 2025.

USDA. 2000. Cleveland National Forest Inventoried Roadless Areas.

USDA. 2003. Forest Service Manual 2300 – Recreation, Wilderness, And Related Resource Management Chapter 2380 - Landscape Management. Online. https://www.fs.usda.gov/about-agency/regulations-policies/manual/2380-landscape-management. Site visited April 28, 2025.

USDA. 2005a. Land Management Plan.

USDA. 2005b. Final Environmental Impact Statement Land Management Plans Angeles National Forest, Cleveland National Forest, Los Padres National Forest, and San Bernardino National Forest.

USDA. 2025. About the Forest. Online. https://www.fs.usda.gov/main/cleveland/about-forest. Site visited April 18, 2025.

USDA. n.d. Cleveland National Forest Scenic Integrity GIS Data.

ATTACHMENT 3.2-A: REPRESENTATIVE AND KEY OBSERVATION POINT PHOTOGRAPHS

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ATTACHMENT 3.2-A: REPRESENTATIVE AND KEY OBSERVATION POINT PHOTOGRAPHS

Representative Photograph 1, Key Observation Point (KOP) 1: Northeast-facing view from Sequan Truck Trail. This KOP is representative of a residential view.

Representative Photograph 2: East-facing view from Sequan Truck Trail. This point is representative of a motorist view.

Representative Photograph 3: Southeast-facing view from Hawks Vista Lane. This point is representative of a residential view.

Representative Photograph 4: South-facing view from Wind Creek Road. This point is representative of a residential view.

Representative Photograph 5, KOP 2: South-facing view from Nightwatch Way. This KOP is representative of a residential view. A visual simulation that depicts the Proposed Project at this location has been prepared and is depicted in Attachment 3.2-B: Visual Simulations.

Representative Photograph 6: East-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 7: West-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 8: East-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 9, KOP 3: West-facing view from Japatul Road. This KOP is representative of a motorist view. A visual simulation that depicts the Proposed Project at this location has been prepared and is depicted in Attachment 3.2-B Visual Simulations.

Representative Photograph 10: South-facing view from Japatul Road. This point is representative of a residential view.

Representative Photograph 11: Southwest-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 12: East-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 13, KOP 4: West-facing view from the California Riding and Hiking Trail (CRHT). This KOP is representative of a recreationist view.

Representative Photograph 14, KOP 5: Southeast-facing view from the CRHT. This KOP is representative of a recreationist view.

Representative Photograph 15: Southeast-facing view from the CRHT. This point is representative of a recreationist view.

Representative Photograph 16, KOP 6: West-facing view from the CRHT. This KOP is representative of a recreationist view.

Representative Photograph 17: Northwest-facing view from the Loveland Reservoir Trail. This point is representative of a recreationist view.

Representative Photograph 18: West-facing view from the Loveland Reservoir Trail. This point is representative of a recreationist view.

Representative Photograph 19, KOP 7: Southeast-facing view from the Loveland Reservoir Trail. This KOP is representative of a recreationist view. A visual simulation that depicts the Proposed Project at this location has been prepared and is depicted in Attachment 3.2-B Visual Simulations.

Representative Photograph 20: Southeast-facing view from the Loveland Reservoir public parking lot. This point is representative of a parked motorist view.

Representative Photograph 21, KOP 8: East-facing view from Japatul Road. This KOP is representative of a motorist view.

Representative Photograph 22, KOP 9: Southeast-facing view from the CRHT. This KOP is representative of a recreationist view.

Representative Photograph 23: Southwest-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 24, KOP 10: Southeast-facing view from Japatul Road. This KOP is representative of a motorist view. A visual simulation that depicts the Proposed Project at this location has been prepared and is depicted in Attachment 3.2-B Visual Simulations.

Representative Photograph 25: West-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 26: Southeast-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 27: Southwest-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 28: South-facing view from Japatul Road. This point is representative of a residential view.

Representative Photograph 29: West-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 30: West-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 31: West-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 32, KOP 11: Southwest-facing view from Japatul Road. This KOP is representative of a residential view.

Representative Photograph 33: Southeast-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 34, KOP 12: West-facing view from Japatul Road. This KOP is representative of a motorist view.

Representative Photograph 35: East-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 36: Northwest-facing view from Japatul Road. This point is representative of a motorist view.

Representative Photograph 37: North-facing view from Japatul Road. This point is representative of a motorist view.

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ATTACHMENT 3.2-B: VISUAL SIMULATIONS

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ATTACHMENT 3.2-B: VISUAL SIMULATIONS

Existing View from Key Observation Point (KOP) 2: South-facing residential view from Nightwatch Way of the Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) area.

Visual Simulation from KOP 2: South-facing residential view from Nightwatch Way of the Proposed Project. A tubular steel pole (TSP) for the proposed 230 kV overhead (OH) segment would be seen in the foreground of the view, and the conductors would be faintly visible against the hills in the background of the view. The weathered TSP would reduce the visual contrast of the TSP against the hills when compared to galvanized poles.

Existing View from KOP 3: West-facing motorist view from Japatul Road of the Proposed Project area.

Visual Simulation from KOP 3: West-facing motorist view from Japatul Road of the Proposed Project. One TSP for the proposed 230 kV OH segment would be seen on the bluff south of Japatul Road, and the conductors would be visible against the sky. An existing wood utility pole would slightly obscure the second TSP in the background of the view.

Existing View from KOP 7: Southeast-facing recreationist view from the Loveland Reservoir Trail of the Proposed Project area. The existing 69 kV transmission line includes structures with distribution underbuilds and telecommunication lines, which are visible below the conductors.

Visual Simulation from KOP 7: Southeast-facing recreationist view from the Loveland Reservoir Trail of the Proposed Project. The TSPs for the proposed 230 kV OH segment would be installed north of the existing 69 kV transmission line. The TSPs would be "soldiered" with the existing 69 kV structures, as the TSPs would be installed adjacent to the existing 69 kV structures to minimize visual contrast. The TSPs and conductors for the Proposed Project would be a similar color as the TSPs and conductors on the existing transmission line.

Existing View from KOP 10: Southeast-facing motorist view from Japatul Road of the Proposed Project area.

Visual Simulation from KOP 10: Southeast-facing motorist view from Japatul Road of the Proposed Project. TSPs for the proposed 230 kV OH segment would be installed north of the existing 69 kV transmission line. The TSPs would be "soldiered" with the existing 69 kV structures, meaning the TSPs would be installed adjacent to the existing 69 kV structures to minimize visual contrast. The TSPs and conductors for the Proposed Project would be a similar color as the TSPs and conductors on the existing transmission line. The weathered TSPs would reduce the visual contrast of the TSPs against the hills and mountains when compared to galvanized poles.

3.3 AGRICULTURE AND FORESTRY

This section describes the existing conditions for agriculture and forestry in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.3.1 Environmental Setting

3.3.1.1 Regional Setting

3.3.1.1.1 Agricultural Resources

The Proposed Project Area is within eastern San Diego County, California. With over 210,000 acres dedicated to agriculture, San Diego County has the fourth-highest number of farms of any county in the United States (U.S.) and the third-highest in California. Agriculture is the fifth-largest sector of San Diego County's economy, with a total production value of $1.66 billion (County of San Diego 2024). Approximately 68 percent of farms in San Diego County are 9 acres or smaller, indicating a considerable number of small and family-owned operations to the region. In addition to producing food and supporting livelihoods, agriculture serves as a valuable open space resource and plays a critical role in regional wildlife conservation by maintaining usable open space corridors and habitat for various species (County of San Diego 2011).

Eastern San Diego County features a regionally important and diverse agricultural landscape, characterized by a mix of small-scale farms, ranches, orchards, and open grazing lands. The area's Mediterranean-like climate is well suited for growing a variety of agricultural products, including top commodities such as nursery crops, avocados, citrus, and vegetables (Farm Bureau of San Diego County 2023). Despite increasing development pressures, agriculture remains a foundational land use in the unincorporated eastern communities. Other predominant land uses in eastern San Diego County include low-density rural residential development and preserved open space.

3.3.1.1.2 Forestry Resources

San Diego County does not contain lands zoned specifically for timber production or forest land; however, the region includes extensive natural forest areas, most notably within the Cleveland National Forest (CNF). Managed by the U.S. Forest Service (USFS), the CNF spans approximately 460,000 acres across San Diego, Riverside, and Orange counties, and represents the largest contiguous forested area in San Diego County (USFS 2025). The CNF encompasses the majority of San Diego County's remaining native forest and woodland habitats and provides critical habitat for numerous special-status species that rely on the forest's relatively undisturbed environment. The CNF's location relative to the Proposed Project is shown in Figure 2-1: Proposed Project Overview Map in Section 2 Project Description in Chapter 2 – Project Description.

While forest products are harvested in San Diego County, they accounted for less than 1 percent of the major crop commodities harvested in 2023 (County of San Diego 2023).

3.3.1.2 Agricultural Resources

The proposed 230 kV overhead (OH) segment would travel adjacent to an area currently used for small-scale crop production between Poles 42 and 44 for a distance of less than 0.10 miles. The proposed 230 kV underground (UG) segments, the existing Suncrest Substation, and the proposed staging yards would not intersect lands currently used for agricultural purposes. Within the Proposed Project Area, agricultural land uses include field crops, orchards and vineyards, and intensive agriculture. Figure 3.3-1: Current Agricultural Land Use within 1 Mile of the Proposed Project identifies areas currently used for agricultural purposes within 1 mile of the Proposed Project. Areas that are zoned for agriculture within or in close proximity to the Proposed Project are described in Section 3.3.1.5 Agricultural Use Zoning Designations.

The proposed 230 kV OH segment and proposed 230 kV underground segments would cross the unincorporated communities of Crest and Alpine. Although these areas are not as intensively farmed as other parts of eastern San Diego County, they still support low-density agricultural activities.

3.3.1.3 Important Farmland

California Public Resources Code (PRC) Section 21060.1 defines "agricultural land" as land categorized by the California Department of Conservation (DOC) as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. These designations are collectively referred to as Important Farmland and are defined as follows:

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields.

- **Farmland of Statewide Importance:** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture.

- **Unique Farmland:** Farmland of lesser-quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California.

The California DOC's Farmland Mapping and Monitoring Program (FMMP) Important Farmland Finder was reviewed to determine areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance where the Proposed Project would be located. The goal of the FMMP is to provide consistent and impartial data to decision-makers for use in assessing present status, reviewing trends, and planning for the future of California's agricultural land resources. The FMMP produces Important Farmland maps, which combine soil quality, available irrigation, and land use information.

Figure 3.3-2: California Important Farmland within 1 Mile of the Proposed Project displays the Proposed Project in relation to California DOC's Important Farmland designations. The Proposed Project would not intersect with lands designated as Important Farmland. No Prime Farmland or Farmland of Statewide Importance occurs within 1 mile of the Proposed Project. Approximately 83 acres of Unique Farmland exist within 1 mile of the Proposed Project.

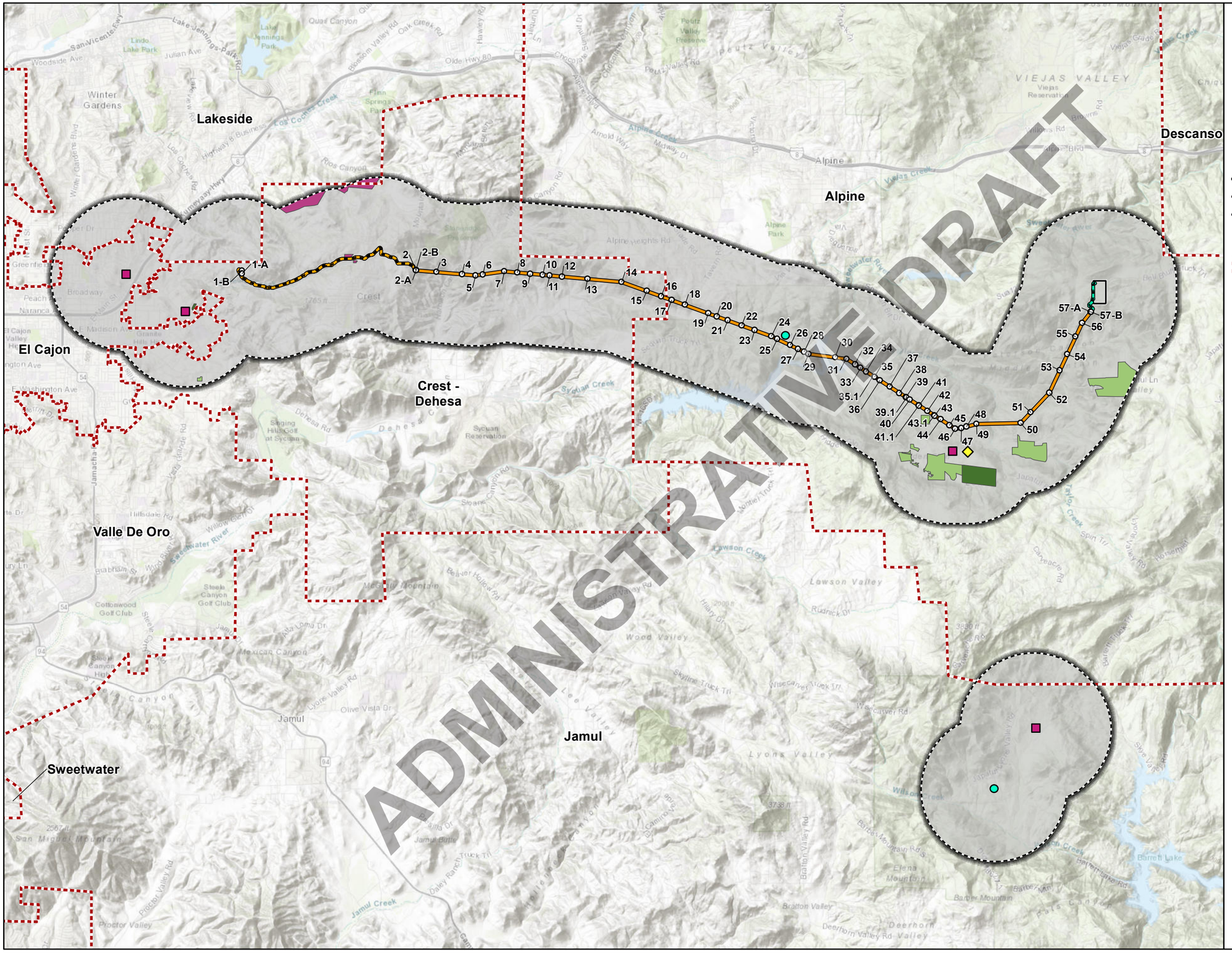

Figure 3.3-1:
Current Agricultural Land Use within 1 Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Pole
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer
- Community Boundary

Current Agricultural Land Use

- Field Crops
- Intensive Agriculture
- Orchard or Vineyard

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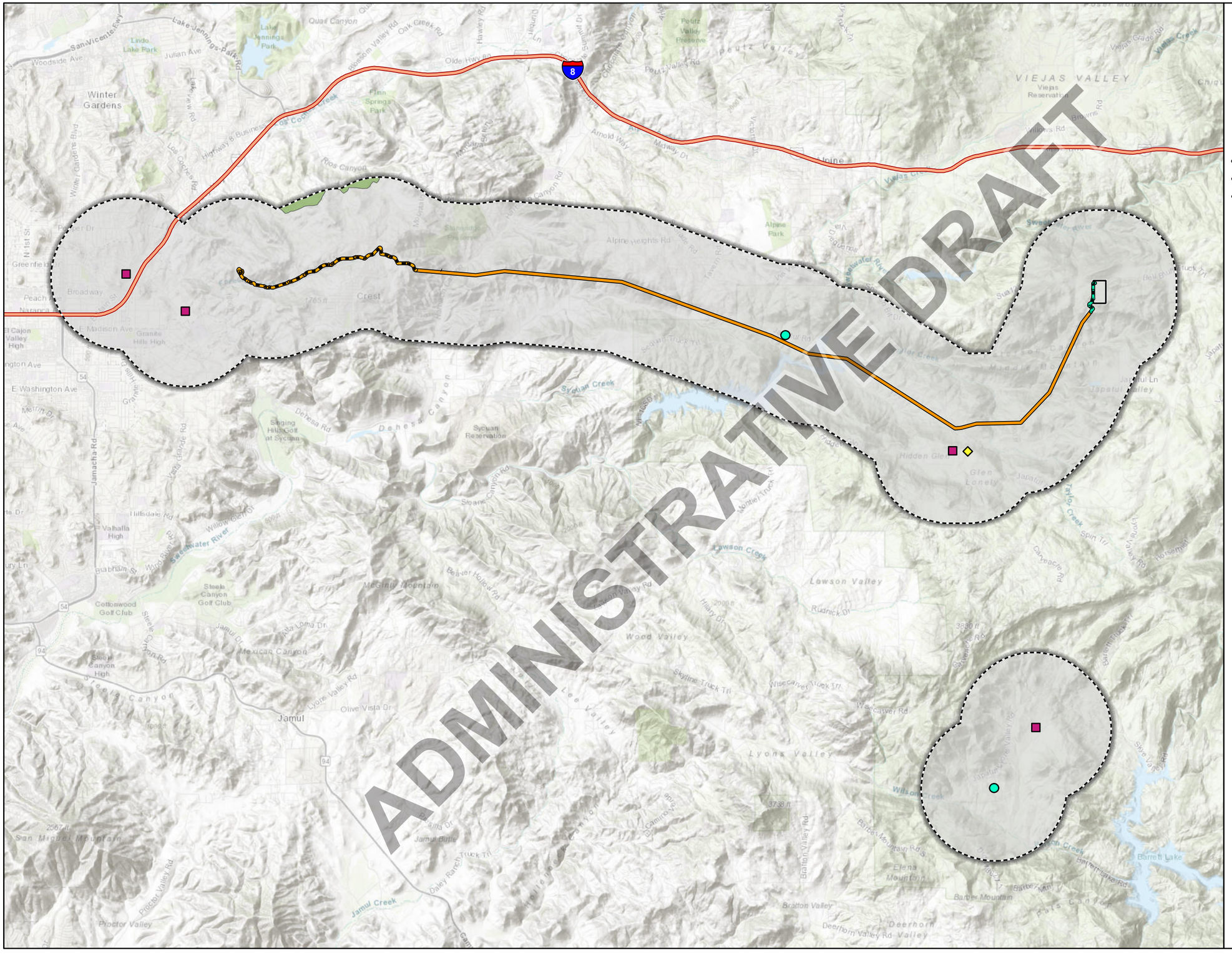

Figure 3.3-2:
California Important Farmland within 1 Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation

Farmland Mapping and Monitoring Program

- Unique Farmland

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While the FMMP identifies Farmland of Local Importance, Grazing Land, Other Land, Urban and Built-up Land, and Water within the Proposed Project Area, these categories are not considered for agricultural impact assessment under the California Environmental Quality Act (CEQA) Appendix G Environmental Checklist. Under CEQA, only Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are evaluated for agricultural impact purposes.

3.3.1.4 Williamson Act Contracts

The California Land Conservation Act of 1956, commonly known as the Williamson Act, allows local governments to contract with landowners to preserve agricultural and open-space lands. In return for keeping their land in agricultural or compatible uses, landowners receive reduced property tax assessments. The Proposed Project would not cross any parcels with existing Williamson Act contracts; however, parcels within 1 mile of the Proposed Project are enrolled in Williamson Act contracts. Figure 3.3-3: Williamson Act Contract Properties within 1 Mile of the Proposed Project depicts parcels under Williamson Act contracts that are within 1 mile of the Proposed Project.

3.3.1.5 Agricultural Use Zoning Designations

The proposed 230 kV OH segment, proposed 230 kV UG segments, the existing Suncrest Substation, and the proposed Sweetwater and High Glen Staging and Fly Yards would be located within agricultural zoning districts. Figure 3.12-2: Zoning Designations within 1 Mile of the Proposed Project in Section 3.12 Land Use and Planning shows the zoning designations within 1 mile of the Proposed Project.

Approximately 0.28 mile of the proposed 230 kV OH segment and 2.80 miles of the proposed 230 kV western UG segment are located on San Diego County land zoned as Limited Agricultural Use (A70). Lands zoned for A70 intend to create and preserve areas intended primarily for agricultural crop production. The designation accommodates small-scale agricultural operations and low-density residential uses. Approximately 10.15 miles of the proposed 230 kV OH segment, 0.01 mile of the proposed 230 kV western UG segment, 0.48 mile of the proposed 230 KV eastern UG segment, and the Sweetwater and High Glen Staging and Fly Yards are located on San Diego County land zoned as General Agricultural (A72). Lands zoned for A72 intend to create and preserve areas for the raising of crops and animals. The designation allows for more intensive farming and a wider variety of agricultural and compatible uses (County of San Diego 2000). The existing, approximately 36.8-acre Suncrest Substation is also located within the A72 zoning designation.

3.3.1.6 Forestry Resources

The PRC and California Government Code (CGC) define forestry resources as land meeting one or more of the following characteristics:

- **Forest Land:** Land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forestry resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits (PRC Section 12220[g]).

- **Timberland:** Land—other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land—that is available for and capable of growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species will be determined by the board on a district basis (PRC Section 4526).

- **Timberland Production Zone:** Areas that have been zoned pursuant to California CGC Section 51112 or 51113 and are devoted to and used for growing and harvesting timber and compatible uses (CGC Section 51104g). In this context, "compatible uses" include any use that does not significantly detract from the use of the property for or inhibit growing and harvesting timber (CGC Section 51104h).

No designated timberland, timber production zones, or land zoned for commercial timber harvesting are located near the Proposed Project. However, the proposed 230 kV OH segment would traverse native forest and woodland vegetation communities (e.g., open Engelmann oak woodland, coast live oak riparian forest, riparian forest, and riparian woodland) that may meet the definition of forest land under PRC Section 12220(g). These communities are located in the eastern portion of the Proposed Project, particularly within Sweetwater Authority and CNF-managed lands. Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area illustrates the distribution of these vegetation communities, and additional details regarding their characteristics are provided in Section 3.5 Biological Resources.

The harvest of wood products is generally permitted within the CNF, except in areas designated as Wilderness and, in most cases, Critical Habitat, per the Southern California National Forests Land Management Plan (LMP) (USFS 2005). While the native forest and woodland areas within the proposed 230 kV OH segment are not currently commercially harvested for timber, they may provide suitable forestry resources. No potential forest land would be crossed by the proposed 230 kV UG segment and the existing Suncrest Substation.

3.3.2 Regulatory Setting

3.3.2.1 Federal

3.3.2.1.1 Farmland Protection Policy Act

The National Agricultural Land Study of 1980-1981 found that millions of acres of farmland were being converted out of agricultural production in the U.S. each year. The 1981 Congressional report "Compact Cities: Energy-Saving Strategies for the Eighties" (Compact Cities report) identified the need for Congress to implement programs and policies to protect farmland and combat urban sprawl and the waste of energy and resources that accompanies sprawling development.

The Compact Cities report indicated that much of the sprawl was the result of programs funded by the federal government. With this in mind, Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA) (Subtitle I of Title XV, Section 1539-1549). The final rules and regulations were published in the Federal Register on June 17, 1995. The FPPA and its implementing rules and regulations set forth provisions intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to non-agricultural uses (U.S. Department of Agriculture [USDA] 2020).

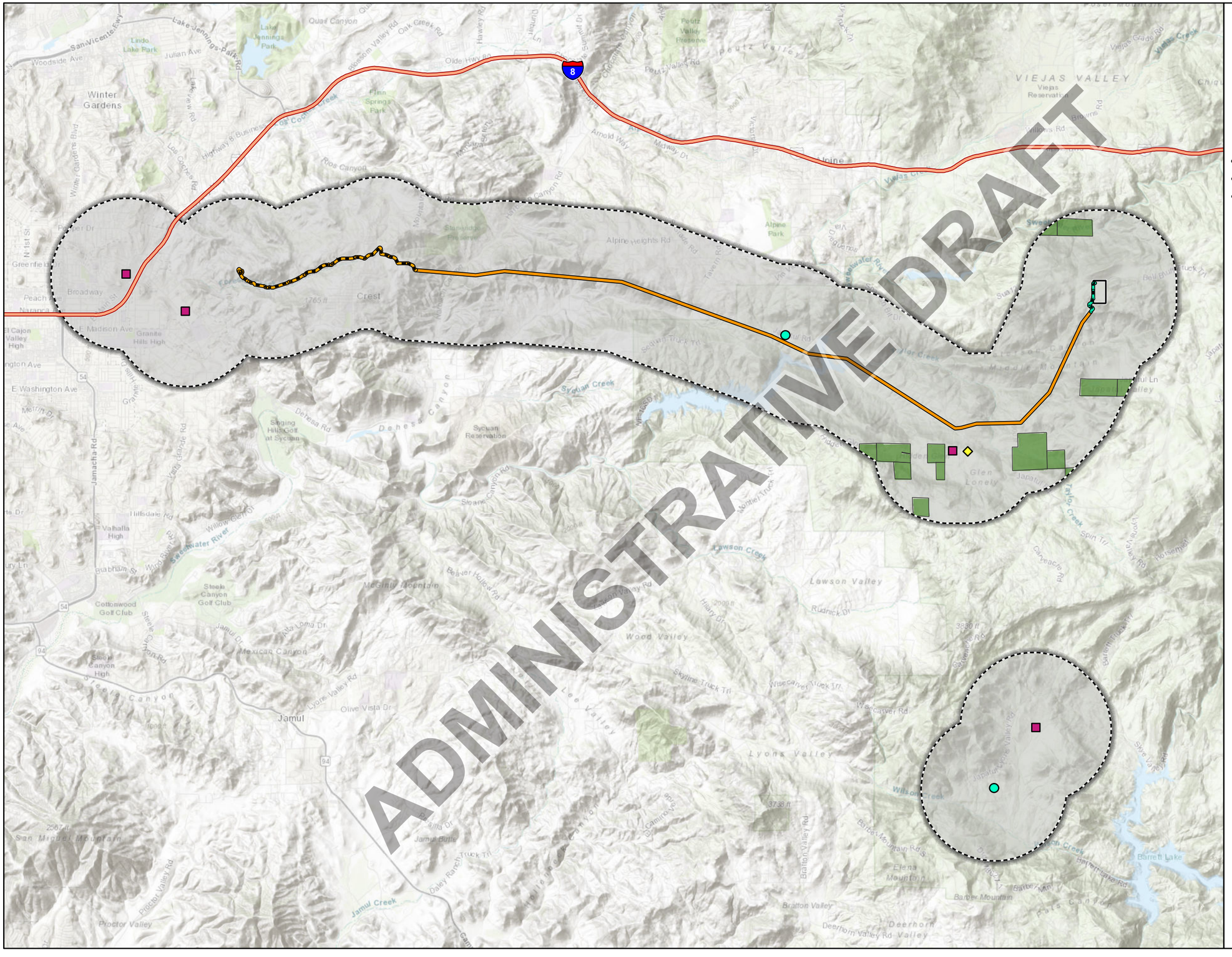

Figure 3.3.-3:
Williamson Act Contract Properties within 1 Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer

Williamson Act

- Contract Properties

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3.3.2.1.2 Southern California National Forests Land Management Plan

Part 2: Cleveland National Forest Strategy of the LMP classifies the activity/use of "Wood Products, including fuelwood harvesting" as suitable for the following land use zones:

- Developed Areas Interface,
- Back country,
- Back Country Motorized Use Restricted, and
- Back Country Non-motorized.

This activity/use is not suitable in areas zoned as Wilderness and is only suitable by exception in areas zoned as Critical Biological.

Additionally, Part 3: Design Criteria for Southern California National Forests of the LMP lists the following vegetation management standard concerning timber harvesting on forests and grasslands:

- **S3. Maximum Size Openings Created by Timber Harvest (36 CFR 219.27 (d) (2))**. Table 3.1: Appropriate Silviculture Systems and Vegetation Treatments by General Forest Type identifies the maximum allowable opening acreage for forest types. This limit shall not apply where harvests are necessary as a result of catastrophic conditions, such as fire, insect and disease attack, windstorm, or drought.

3.3.2.2 State

3.3.2.2.1 Williamson Act

The California Land Conservation Act of 1965 (Williamson Act) (CGC Section 51200 et seq.) enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are much lower than normal because they are based on farming and open space uses as opposed to full market value (CGC 2025a).

The Williamson Act also allows local governments to establish agricultural preserves, which are parcels of land set aside for agricultural uses (CGC Section 51230). These parcels are a minimum of 100 acres and are typically not located in areas where public utility improvements and associated land acquisitions may be necessary (CGC 2025c).

The Williamson Act declares that agricultural land parcels will be large enough to sustain their agricultural use if the land is at least 10 acres in the case of prime agricultural land, or at least 40 acres in the case of land that is not prime agricultural land (CGC Section 51222). Although the Williamson Act does not specify compatible land uses for property located adjacent to contract lands or agricultural preserves, it does state that cities and counties must determine compatible land use types while recognizing that temporary or permanent population increases frequently impair or hamper agricultural operations (CGC 2025b).

3.3.2.2.2 California Government Code Section 51238

CGC Section 51238 includes the provisions related to the Williamson Act that state the following (CGC 2023):

> "Notwithstanding any determination of compatible uses by the county or city pursuant to this article, unless the board or council after notice and hearing makes a finding to the contrary, the erection, construction, alteration, or maintenance of gas, electric, water, communication, or agricultural laborer housing facilities are hereby determined to be compatible uses within any agricultural preserve."

3.3.2.2.3 Farmland Mapping and Monitoring Program

The California DOC, under the Division of Land Resource Protection, has established the FMMP to monitor the conversion of the state's farmland to and from agricultural use. The FMMP maps agriculturally viable lands and designates specific categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Non-Prime Farmland. The California DOC prepares and maintains an automated map and database system to record and report changes in the use of agricultural lands every 2 years on even-numbered calendar years (California DOC 2025).

3.3.2.2.4 California Farmland Conservancy Program

The California Farmland Conservancy Program, created under PRC Sections 10200-10277, aims to protect California's farmland over the long term by using agricultural conservation easements. Besides offering grants for purchasing easements, the program also provides funding for projects that support agricultural land protection through policy development or planning efforts. It also supports improvements to land already protected by easements, such as erosion prevention or enhancements to riparian zones. Additionally, the program can receive private donations, as long as the California DOC is named as the beneficiary and the funds are used in the donor's specified county for program-related purposes (California PRC 2023).

3.3.2.3 Local

3.3.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan lists the following policies that are relevant to the Proposed Project concerning agriculture and forestry throughout its jurisdiction:

- **Policy COS-6.2: Protection of Agricultural Operations.** Protect existing agricultural operations from encroachment of incompatible land uses by doing the following:
  - Limiting the ability of new development to take actions to limit existing agricultural uses by informing and educating new projects as to the potential impacts from agricultural operations.
  - Encouraging new or expanded agricultural land uses to provide a buffer of non-intensive agriculture or other appropriate uses (e.g., landscape screening) between intensive uses and adjacent non-agricultural land uses.

- Requiring development to minimize potential conflicts with adjacent agricultural operations through the incorporation of adequate buffers, setbacks, and project design measures to protect surrounding agriculture.

- **Policy LU-5.3: Rural Land Preservation.** Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi-Rural Land Use Designations.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed, and no goals and policies that are relevant to agriculture and forestry for the Proposed Project were identified (County of San Diego 2020).

3.3.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals and policies that pertain to the Proposed Project concerning agriculture and forestry throughout its jurisdiction were identified (City of El Cajon 2000).

3.3.3 Impact Analysis and Mitigation Measures

3.3.3.1 Analysis Methodology

Impacts to agriculture and forestry were determined based on information summarized in Section 3.3.1 Environmental Setting that was obtained from reviews of the following:

- California DOC FMMP data and maps;
- Williamson Act contract maps;
- vegetation community maps and habitat assessment data;
- the Southern California National Forests LMP for relevant land use classifications and vegetation management guidance;
- aerial imagery; and
- local agency planning documents.

3.3.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to agriculture and forestry.

3.3.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For agriculture and forestry, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use?

- Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by CGC Section 51104[g])?
- Result in the loss of forest land or conversion of forest land to non-forest use?
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

3.3.3.4 Impact Analysis

3.3.3.4.1 Impact AG-01: Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Construction, Operations and Maintenance

No Impact. The Proposed Project would not require the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agriculture use. While approximately 83 acres of Unique Farmland are located within 1 mile of the Proposed Project, no Proposed Project components would occur on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown in Figure 3.3-2: California Important Farmland within 1 Mile of the Proposed Project. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted as a result of construction or O&M activities associated with the Proposed Project, and no impact would occur.

3.3.3.4.2 Impact AG-02: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Construction, Operations and Maintenance

No Impact. The Proposed Project would not cross any parcels with existing Williams Act contracts, as shown in Figure 3.3-3: Williamson Act Contract Properties within 1 Mile of the Proposed Project. Therefore, the Proposed Project would not conflict with any existing Williamson Act contracts during construction or O&M of the Proposed Project, and there would be no impact.

Portions of the Proposed Project would be located within the County's agricultural zoning districts. Approximately 2.80 miles of the proposed 230 kV western UG segment and 0.28 mile of the proposed 230 kV OH segment would be located on land zoned as A70. Approximately 0.01 mile of the proposed 230 kV western UG segment, 0.48 mile of the proposed 230 kV eastern UG segment, 10.15 miles of the proposed 230 kV OH segment, the existing Suncrest Substation, and the Sweetwater and High Glen Staging and Fly Yards would be located on land zoned as A72. The Proposed Project would not conflict with the A70 and A72 zones, as these designations allow Minor Impact Utilities with issuance of a Minor Use Permit and Major Impact Services and Utilities with a Major Use Permit (County of San Diego 2011). Although

the Proposed Project would require permits to be constructed in agricultural zoning districts, electric transmission facilities that are regulated by the CPUC are not subject to local land use and zoning regulations pursuant to CPUC GO 131-E, Section XI.B. Therefore, the Proposed Project would not conflict with existing zoning for agricultural use. The Proposed Project's construction and O&M activities would have no effect on local zoning. No impact would occur.

3.3.3.4.3 Impact AG-03 Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?

Construction, Operations and Maintenance

No Impact. The Proposed Project would not be located in any areas zoned for forest land, timberland, or timberland zoned for Timber Production within the County's jurisdiction. Although the proposed 230 kV OH segment would cross approximately 2.97 miles of land within the CNF, this would not conflict with the existing zoning or cause rezoning of forest land. Within the CNF, the Proposed Project would traverse lands designated as Developed Areas Interface and Back Country Motorized Use Restricted. These designations are intended to balance resource protection with public access and infrastructure needs. Major utility corridors are considered suitable uses within certain areas of these designations. As such, the Proposed Project's construction and O&M activities would have no effect on the zoning for forest land, nor would they require any rezoning actions. Therefore, no impact would occur.

3.3.3.4.4 Impact AG-04: Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Construction, Operations and Maintenance

Less-than-Significant Impact. The proposed 230 kV OH segment would cross native forest and woodland vegetation communities that may meet the PRC Section 12220(g) definition of forest land. However, vegetation removal would be limited to the minimum necessary for construction and O&M activities. If vegetation removal were to occur within forest land, as defined by PRC Section 12220(g), SDG&E would restore the land in accordance with the Habitat Restoration and Revegetation Plan described in Section 3.5 Biological Resources. This measure includes utilizing vegetation management practices to minimize disturbance, maintain compatibility with forestry resources, and provide habitat compensation or restoration for any permanent impacts. However, construction of new poles on forest land would be accomplished using helicopters or by accessing pole locations with existing access roads and thereby limiting ground disturbance. As a result, no forest land would be permanently converted to non-forest use, and impacts would be less than significant.

Although the proposed 230 kV OH segment would cross approximately 2.97 miles of land within the CNF, no impacts to native forest and woodland vegetation communities are anticipated in the national forest. Work areas within the CNF would primarily be located in chaparral and coastal sage/chaparral mix communities.

3.3.3.4.5 Impact AG-05: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Construction, Operations and Maintenance

Less-than-Significant Impact. The Proposed Project would not convert Important Farmland or forest land to non-agricultural or non-forest uses. No portion of the Proposed Project would be located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. While areas of Unique Farmland occur within 1 mile of the proposed 230 kV western UG segment, no access routes, structures, or other improvements would be developed in proximity to Important Farmland that could facilitate incompatible development. The Proposed Project's construction and O&M activities would not result in land use changes that could indirectly lead to the conversion of Important Farmland to non-agricultural uses.

The proposed 230 kV OH segment would traverse native forest and woodland vegetation communities that may meet the definition of forest land under PRC Section 12220(g). While limited vegetation removal may occur, SDG&E would implement a Habitat Restoration and Revegetation Plan to avoid or minimize permanent impacts. The Proposed Project's construction and O&M activities would not result in land use changes that could indirectly lead to the conversion of forest land to non-forest use. As a result, the Proposed Project would not result in changes to the existing environment that could lead to the conversion of Important Farmland or forest land, and impacts would be less than significant.

3.3.4 References

California DOC. 2025. Farmland Mapping and Monitoring Program. Online. https://www.conservation.ca.gov/dlrp/fmmp/. Site visited May 2025.

California PRC. 2023. Section 10231.5. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-10231-5/. Site visited May 2025.

CGC. 2023. Section 51238. Online. https://codes.findlaw.com/ca/government-code/gov-sect-51238/. Site visited May 2025.

CGC. 2025a. Section 51200 et seq. Online. https://california.public.law/codes/ca_gov't_code_section_51200. Site visited May 2025.

CGC. 2025b. Section 51222. Online. https://california.public.law/codes/ca_gov't_code_section_51222. Site visited May 2025.

CGC. 2025c. Section 51230. Online. https://california.public.law/codes/ca_gov't_code_section_51230. Site visited May 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

County of San Diego. 2000. Zoning Ordinance of San Diego County. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/zoning/2000-REV-12-24.pdf. Site visited May 2025.

County of San Diego. 2011. Chapter 5 Conservation and Open Space Element. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/docs/GP/ConservationandOpenSpace.pdf. Site visited May 2025.

County of San Diego. 2020. Draft Alpine Community Plan. San Diego County General Plan Part XI. Online. https://www.sandiegocounty.gov/pds/gpupdate/docs/bos_oct2010/B2.01_alpine.cp_102010.pdf. Site visited November 2025.

County of San Diego. 2023. 2023 Crop Statistics & Annual Report. Online. https://www.sandiegocounty.gov/content/dam/sdc/awm/docs/Crop_Reports/2023_Crop_Report.pdf. Site visited May 2025.

Farm Bureau of San Diego County. 2025. Agriculture in San Diego. Online. https://www.sdfarmbureau.org/ag-in-san-diego-county/. Site visited May 2025.

USDA. 2020. Farmland Protection Policy Act: Program Overview and NRCS Responsibilities. Online. https://www.nrcs.usda.gov/sites/default/files/2022-06/FPPA-webinar-10-27-2020-FINAL_v1.1_0.pdf. Site visited May 2025.

USFS. 2005. Land Management Plan, Part 2 Cleveland National Forest Strategy. Online. https://www.fs.usda.gov/r05/cleveland/planning. Site visited May 2025.

USFS. 2025. Cleveland National Forest – About the Area. Online. https://www.fs.usda.gov/r05/cleveland/about-area. Site visited May 2025.

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3.4 AIR QUALITY

This section describes the existing conditions for air quality in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential environmental impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.4.1 Environmental Setting

3.4.1.1 Air Districts

The state of California has 35 specific air districts, which are each responsible for ensuring that criteria air pollutant (CAP) emissions meet the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Air quality is managed by air districts through monitoring and management of air basins. Air quality compliance and implementation of planning documents are therefore addressed at the air basin level. The Proposed Project would be situated within the San Diego Air Basin (SDAB) under the jurisdiction of the San Diego Air Pollution Control District (SDAPCD).

3.4.1.2 Regional Climate and Meteorology

The boundaries of the SDAB are contiguous with the jurisdictional boundaries of the County of San Diego (County) and encompass approximately 4,260 square miles. Climate in the SDAB is generally warm, with low annual rainfall occurring mostly during the winter months. Climate plays an important role in the air quality of the SDAB. When cool, moist air from the coast travels toward higher elevations, a temperature inversion can occur. This inversion layer prevents polluted air from rising and dispersing (County of San Diego 2011a).

The Alpine Remote Automated Weather Station (RAWS) is approximately 2 miles north of the center of the Proposed Project. From 2000 to 2024, the average annual temperature in the Proposed Project Area was 63 degrees Fahrenheit (°F), with an average annual maximum temperature of 103°F and average annual minimum temperature of 30°F. From 2000 to 2024, the average annual precipitation total was 14.9 inches. February was typically the wettest month of the year, with an average monthly precipitation total of 3.1 inches each year (National Oceanic Atmospheric Administration [NOAA] 2025). Wind direction is typically from the east and southwest with speeds averaging between 4 and 13 miles per hour (mph) (RAWS Climate Archive 2025).

Because the Proposed Project Area experiences high temperatures in the summer months and does not experience high wind speeds, the Proposed Project Area may be more susceptible to elevated levels of ozone (O_3). In addition, the low annual precipitation levels may make the Proposed Project Area more susceptible to elevated levels of particulate matter (PM).

3.4.1.3 Criteria Air Pollutants

It is the responsibility of the SDAPCD to ensure that the CAAQS and NAAQS are achieved and maintained. Health-based air quality standards have been established for the following CAPs:

- O_3,
- PM with a mean diameter of less than 10 microns (PM_{10}),
- PM with a mean diameter of less than 2.5 microns ($PM_{2.5}$),
- carbon monoxide (CO),
- nitrogen dioxide (NO_2),
- sulfur dioxide (SO_2), and
- lead (Pb).

Non-methane ethane volatile organic compounds (VOCs), also referred to as reactive organic gases (ROGs), are also regulated as precursors to the formation of O_3. Furthermore, California has set additional standards for sulfates, hydrogen sulfide (H_2S), vinyl chloride (C_2H_3Cl), and visibility-reducing particles (VRP). The CAAQS and NAAQS for CAPs are summarized in Table 3.4-1: Ambient Air Quality Standards. Descriptions of CAPs are provided in the following subsections.

3.4.1.3.1 Ozone

O_3 is a colorless gas that is not directly emitted as a pollutant, but is formed when ROGs, hydrocarbons, and nitrogen oxides (NO_x) react in the presence of heat and sunlight. Low wind speeds or stagnant air mixed with warm temperatures typically provide optimum conditions for the formation of O_3. Because O_3 formation does not occur quickly, O_3 concentrations often peak downwind of the emission source. As a result, O_3 is of regional concern as it can impact a large area. When inhaled, O_3 can irritate and damage the respiratory system.

3.4.1.3.2 Particulate Matter

PM, which is defined as particles suspended in a gas, is often a mixture of substances, including metals, nitrates, organic compounds, and complex mixtures (e.g., diesel exhaust and soil). PM can be traced back to both natural and man-made sources. The most common sources of natural PM are dust and fires, while the most common man-made source is the combustion of fossil fuels.

PM can cause irritation to the human respiratory system when inhaled. The extent of the health risks due to PM exposure can be determined by the size of the particles. The smaller the particles, the deeper they can be deposited in the lungs. PM is often grouped into the following two categories:

- PM_{10}: inhalable PM less than 10 microns in diameter, and
- $PM_{2.5}$: fine PM less than 2.5 microns in diameter.

Table 3.4-1: Ambient Air Quality Standards

Pollutant	Average Time	CAAQS[1]		NAAQS[2]		
		Concentration[3]	Method[4]	Primary[3, 5]	Secondary[3, 6]	Method[7]
O_3[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet photometry	NA	NA	NA
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)	Same as Primary Standard	Ultraviolet Photometry
PM_{10}[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		NA	NA	NA
$PM_{2.5}$[9]	24 Hour	NA	NA	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12.0 µg/m^3	Gravimetric or Beta Attenuation	9.0 µg/m^3	15 µg/m^3	
CO	8 Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry	9.0 ppm (10 mg/m^3)	NA	Non-Dispersive Infrared Photometry
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)	NA	
NO_2[10]	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)[8]	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		0.100 ppm[8] (188 µg/m^3)	NA	

Pollutant	Average Time	CAAQS[1]		NAAQS[2]		
		Concentration[3]	Method[4]	Primary[3, 5]	Secondary[3, 6]	Method[7]
SO_2[11]	Annual Arithmetic Mean	NA	NA	0.030 ppm[10] (for Certain Areas)	NA	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)[9]
	24 Hour	0.04 ppm (105 µg/m^3)	Ultraviolet Fluorescence	0.14 ppm[10] (for Certain Areas)[9]	NA	
	3 Hour	NA	NA	NA	0.5 ppm (1,300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	NA	
Pb[12, 13]	30-Day Average	1.5 µg/m^3	Atomic Absorption	NA	NA	NA
	Calendar Quarter	NA	NA	1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	NA	NA	0.15 µg/m^3		
VRPs	8 Hour	See Note 14	Beta Attenuation and Transmittance through Filter Tape	NA	NA	NA
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography	NA	NA	NA
H_2S	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence	NA	NA	NA
C_2H_3Cl[12]	24 Hour	0.010 ppm (26 µg/m^3)	Gas Chromatography	NA	NA	NA

Source: California Air Resources Board (CARB) 2024

Acronyms: ppm = parts per million; µg/m^3 = micrograms per cubic meter; NA = Not applicable

Notes:

1 CAAQS for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and PM (PM_{10}, $PM_{2.5}$, and VRP) are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Title 17 California Code of Regulations Section 70200.

2 NAAQS (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent

of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the United States (U.S.) Environmental Protection Agency (EPA) for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent procedure that can be shown to the satisfaction of CARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used, but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] In February 2024, U.S. EPA lowered the federal primary $PM_{2.5}$ annual standard to 9 µg/m^3 from the 12.0 µg/m^3 standard set in 2012. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour NAAQS, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. CAAQS are in units of ppm. To directly compare the 1-hour NAAQS to the CAAQS, the units can be converted from ppb to ppm. In this case, the NAAQS of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour NAAQS, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 NAAQS (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard; however, in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[12] CARB has identified Pb and C_2H_3Cl as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for Pb was revised on October 15, 2008 to a rolling 3-month average. The 1978 Pb standard (1.5 µg/m^3 as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard; however, in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

3.4.1.3.3 Carbon Monoxide

CO is a colorless, odorless, and tasteless gas that is directly emitted as a byproduct of combustion. CO concentrations tend to be localized to the source, with the highest concentrations being associated with cold, stagnant weather conditions. CO is readily absorbed through the lungs into the blood, where it can reduce the ability of the blood to carry oxygen.

3.4.1.3.4 Nitrogen Oxides

NO_x is a generic name for the group of reactive gases that contain nitrogen and oxygen in varying amounts. Many types of NO_x are colorless and odorless. However, when combined with particles in the air, the common pollutant NO_2 can often be seen as a reddish-brown layer over many urban areas.

NO_x forms when fuel is burned at high temperatures. Typical man-made sources of NO_x include motor vehicles; fossil-fueled electricity generation utilities; and other industrial, commercial, and residential sources that burn fuels. NO_x can harm humans by affecting the respiratory system. Small particles can penetrate the sensitive parts of the lungs and can cause or worsen respiratory disease and can aggravate existing heart conditions.

3.4.1.3.5 Sulfur Oxides

Sulfur oxides (SO_x) is a generic name for the group of reactive gases that contain sulfur and oxygen in varying amounts, including SO_2. SO_x are formed when sulfur-containing materials are processed or burned. SO_x sources include industrial facilities (e.g., petroleum refineries and cement manufacturing and metal processing facilities), locomotives, large ships, and some non-road diesel equipment. A wide variety of health and environmental impacts are associated with SO_x because of the way it reacts with other substances in the air. A number of people are particularly sensitive to SO_x emissions, including children, the elderly, people with asthma, and people with heart or lung disease. When inhaled, these particles can gather in the lungs and can contribute to increased respiratory symptoms and disease, difficulty breathing, and premature death.

Sulfates are a family of chemicals that contain the fully oxidized ionic form of sulfur (SO_4^{2-}), in combination with metal and/or hydrogen ions. In California, emissions of sulfur-containing compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. Sulfates can be a significant portion of $PM_{2.5}$, and they can induce a wide range of adverse health effects, such as reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency department visits, hospitalizations, and death in people who have chronic heart or lung diseases. Groups having higher risk of experiencing adverse health effects of sulfate exposure include children, asthmatics, and older adults who have chronic heart or lung diseases (CARB 2025b).

3.4.1.3.6 Lead

Sources of Pb vary, but are primarily associated with metals processing, waste incinerators, utilities, and lead-acid battery manufacturers. Depending on the level of exposure, Pb can adversely affect the nervous system, kidney function, immune system, reproductive and

developmental systems and the cardiovascular system. Infants and young children are especially sensitive to Pb exposure (U.S. EPA 2024).

3.4.1.3.7 Visibility Reducing Particles

PM pollution impacts the environment by decreasing visibility (i.e., haze). Some haze-causing particles are directly emitted to the air, such as windblown dust and soot. Others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, and organic carbon particles), which are the major constituents of $PM_{2.5}$. Fine particles, caused largely by combustion of fuel, can travel hundreds of miles and cause visibility impairment. The statewide 10-mile visibility standard is also known as the "extinction of 0.23 per kilometer"[1] (CARB 2025d).

3.4.1.3.8 Hydrogen Sulfide

H_2S is a colorless gas with the odor of rotten eggs. The most common sources of H_2S emissions are oil and natural gas extraction and processing, as well as natural emissions from geothermal fields. H_2S can induce tearing of the eyes and symptoms related to overstimulation of the sense of smell, including headache, nausea, or vomiting. On a population basis, the average odor detection threshold is 0.03 to 0.05 ppm, although some individuals can detect H_2S at lower concentrations. Exposure to even higher levels of H_2S (over 300 ppm) can induce serious adverse health effects, although these exposures are typically only encountered in occupational or industrial accident situations (CARB 2025a).

3.4.1.3.9 Vinyl Chloride

C_2H_3Cl is a colorless gas with a mild, sweet odor. Most C_2H_3Cl is used in the process of making polyvinyl chloride plastic and vinyl products. As a result, it may be emitted from industrial processes. Short-term exposure to high levels (10 ppm or above) of C_2H_3Cl in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. The primary non-cancer health effect of long-term exposure to C_2H_3Cl through inhalation is liver damage. The people most at risk are those who have long-term exposure to elevated levels in occupational or industrial settings (CARB 2025c).

3.4.1.4 Air Quality Designations

The following three air quality designations can be given to an area for a particular pollutant:

- Nonattainment: This designation applies when standards have not been met.
- Attainment: This designation applies when standards are achieved.
- Unclassified: This designation applies when there is not sufficient monitoring data to determine attainment or nonattainment.

As summarized in Table 3.4-2: Attainment Status within the SDAPCD, the Proposed Project Area is currently designated as a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

[1] "Extinction of 0.23 per kilometer" is defined as particles in a sufficient amount to reduce visibility to less than 10 miles when the relative humidity is less than 70 percent (Sacramento Metropolitan Air Quality Management District 2025). Visibility is determined through beta attenuation and transmittance through filter tape.

Table 3.4-2: Attainment Status within the SDAPCD

CAP	State	Federal[2]
O_3 (8-hour)	Nonattainment	Nonattainment
O_3 (1-hour)	Nonattainment	Attainment
PM_{10}	Nonattainment	Unclassifiable
$PM_{2.5}$	Nonattainment	Unclassifiable/Attainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb	Attainment	Unclassifiable/Attainment
VRPs	Unclassified	NA
Sulfates	Attainment	NA
H_2S	Unclassified	NA

Source: CARB 2023

3.4.1.5 Monitoring Station Data and Attainment Designations

Violations of NAAQS and CAAQS for O_3 and $PM_{2.5}$ have occurred historically in the Proposed Project Area. The two nearest air monitoring sites to the Proposed Project would be the Alpine-Victoria Drive monitoring station, approximately 2.6 miles north of the Proposed Project, and the El Cajon-Lexington Elementary School monitoring station, approximately 3.4 miles west of the Proposed Project. The frequency of violations and current air quality conditions at these two monitoring sites are summarized for O_3 and $PM_{2.5}$ in Table 3.4-3: Recent Air Quality Concentrations and Table 3.4-4: Frequency of Air Quality Standard Violations.

3.4.1.6 Toxic Air Contaminants

TACs are the listed toxic pollutants as established by the California Office of Environmental Health Hazard Assessment (OEHHA). Under Assembly Bill 1807, CARB is required to use certain criteria in prioritizing, identifying, and controlling air toxins. In selecting substances for review, CARB must consider pollutants that may pose a threat to human health or may cause or contribute to serious illnesses or death. For many TACs, no threshold level exists below which adverse health impacts may not be expected to occur. This contrasts with the CAPs, for which acceptable levels of exposure can be determined and for which the federal and state governments have set ambient air quality standards.

[2] At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Table 3.4-3: Recent Air Quality Concentrations

Monitoring Station	Year	O_3, Maximum 1-hour (ppm)	$PM_{2.5}$, Maximum State 24-hour ($\mu g/m^3$)	$PM_{2.5}$, Maximum National 24-hour ($\mu g/m^3$)
Alpine-Victoria Drive	2023	0.103	- -	13.2
	2022	0.100	15.7	17.6
	2021	0.099	23.1	- -
	2020	0.105	22.9	- -
El Cajon-Lexington Elementary School	2023	0.099	- -	23.2
	2022	0.100	27.3	26.4
	2021	0.088	31.5	30.2
	2020	0.094	41.6	38.2

Source: CARB 2025e
Note: "- -" = insufficient or unavailable data. Insufficient or no data was available to determine the state or national 24-hour maximum PM_{10} average between 2020 and 2023.

Table 3.4-4: Frequency of Air Quality Standard Violations

Monitoring Station	Year	Number of Days in Exceedance of Standards	
		O_3 State 1-hour	$PM_{2.5}$ National 24-hour
Alpine-Victoria Drive	2023	3	- -
	2022	2	- -
	2021	2	- -
	2020	5	- -
El Cajon-Lexington Elementary School	2023	0	2.2
	2022	1	0
	2021	0	0
	2020	0	2.2

Source: CARB 2025e
Note: "- -" = insufficient or unavailable data. Insufficient or no data was available to determine the estimated days that exceeded state or national 24-hour PM_{10} standards.

PM emissions generated by diesel combustion, or diesel PM (DPM), are of particular concern in California. In 1998, the OEHHA completed a 10-year comprehensive human health assessment of diesel exhaust. The results of this assessment formed the basis for CARB to formally identify DPM as a TAC that poses a threat to human health. Because no established ambient air quality standards exist for TACs, they are managed on a case-by-case basis, depending on the quantity and type of emissions and the proximity of potential receptors. DPM emissions result from a wide variety of sources, including on-road and off-road vehicles and stationary and portable internal combustion engines.

3.4.1.7 Sensitive Receptors

Some exposed population groups (e.g., children and people who are elderly or ill) can be especially vulnerable to airborne chemicals and irritants and are termed "sensitive receptors." In addition, due to sustained exposure durations, all persons located within residential areas are considered sensitive receptors. In general, sensitive receptor locations include, but are not limited to schools, hospitals, day care centers, convalescence homes, residential uses, places of worship, libraries, offices, city and county buildings, and outdoor recreational areas.

The Proposed Project is located within a region predominantly occupied by undeveloped lands and residential homes. As shown in Attachment 3.4-A: Sensitive Receptors within 1,000 Feet of the Proposed Project, approximately 343 residences are located within 1,000 feet of the Proposed Project. Six residences are within 100 feet of the proposed 230 kV western underground (UG) segment, and four residences are within 300 feet of the proposed 230 kV overhead (OH) segment. Approximately 103 residential homes, four hospitals, and one place of worship are within 1,000 feet of the proposed Hospital Staging Yard. Approximately 120 residential homes, one day care center, and three schools are within 1,000 feet of the proposed Greenfield Staging Yard. Approximately six residential homes are within 1,000 feet of the proposed High Glen Staging Yard and proposed High Glen Fly Yard.

3.4.2 Regulatory Setting

3.4.2.1 Federal

3.4.2.1.1 Clean Air Act

The 1970 federal Clean Air Act (CAA) established ambient air quality standards for six pollutants—O_3, PM_{10}, CO, NO_2, SO_2, and Pb—that are known to have adverse impacts on human health and the environment. To protect human health and the environment, the U.S. EPA set primary and secondary maximum ambient thresholds for CAPs, as summarized in Table 3.4-1: Ambient Air Quality Standards. The primary thresholds were set to protect human health, particularly for children and the elderly, as well as for individuals who suffer from chronic lung conditions (e.g., asthma and emphysema). The secondary standards were set to protect the natural environment and prevent further adverse effects on animals, crops, vegetation, and buildings. The NAAQS are the combined primary and secondary standards set by the U.S. EPA. The 1977 CAA Amendments required each state to develop and maintain a State Implementation Plan (SIP) for each CAP that exceeds the NAAQS for that pollutant. The SIP serves as a tool to reduce levels of pollutants known to cause impacts if they exceed ambient thresholds and to achieve compliance with the NAAQS. In 1990, the CAA was further amended to strengthen regulation of both stationary and mobile emission sources for the CAPs.

A new federal O_3 standard of 0.080 ppm was established in 1997 and was based on a longer averaging period (8 hours versus 1 hour), recognizing that prolonged exposure to O_3 is more damaging. In 2001, the U.S. EPA implemented new health-based NAAQS for O_3 and PM_{10}. In February 2007, the NAAQS for NO_2 was amended to lower the existing not-to-exceed 1-hour standard of 0.25 ppm to 0.18 ppm and established a new annual standard of 0.030 ppm. In March 2008, the U.S. EPA further lowered the 8-hour O_3 standard from 0.080 ppm to 0.075 ppm. The new federal standard for PM is based on finer particles ($PM_{2.5}$ versus PM_{10}), recognizing that $PM_{2.5}$ may remain in the lungs longer and contribute to greater respiratory illness. In October 2015, the national 8-hour O_3 primary and secondary standards were lowered from 0.075 ppm to 0.070 ppm.

In August 2022, U.S. Congress passed the Inflation Reduction Act, which added seven new sections to the CAA (Sections 132 through 138), providing the U.S. EPA with over $41 billion to implement new programs, as well as increase the effectiveness and usability of existing ones.

In June 2025, the U.S. Congress nullified a rule submitted by the U.S. EPA relating to the "Review of Final Rule Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act" (89 Federal [Fed.] Regulation [Reg.] 73293) in September 2024. 89 Fed. Reg. 73293 required that sources subject to certain "major source"[3] National Emission Standards for Hazardous Air Pollutants (NESHAP) used to meet obligations under the CAA for seven specific persistent and bioaccumulative pollutants must remain subject to those NESHAP even if the sources reclassify to "area source"[4] status. As a result of the June 2025 ruling, 89 Fed. Reg. 73292 has no force or effect, and "major sources" that reclassify to "area source" status will no longer be subject to NESHAP requirements, as long as the sources' emissions remain below the applicable emissions thresholds (U.S. EPA 2025).

3.4.2.1.2 Southern California National Forests Land Management Plan

Part 2: Cleveland National Forest Strategy of the Southern California National Forests Land Management Plan (LMP) describes the strategic direction and program emphasis objectives that are expected to result in the sustainability (e.g., social, economic, and ecological) of the Cleveland National Forest and, over the long term, the maintenance of a healthy forest. The following policy from the LMP is relevant to the Proposed Project (U.S. Forest Service [USFS] 2005):

- Policy Air 1: Minimize Smoke and Dust. Control and reduce smoke and fugitive dust to protect human health, improve safety and/or reduce or eliminate environmental impacts.
    - Incorporate visibility requirements into project plans.

[3] "Major sources" emit or have the potential to emit 10 tons per year or more of a single hazardous air pollutant (HAP) or 25 tons per year of a combination of HAP.
[4] "Area sources" emit HAP at levels below "major source" thresholds.

3.4.2.2 State

3.4.2.2.1 California Clean Air Act

The California Clean Air Act of 1988 (CCAA) provided the framework for the management of air quality throughout the state. The CCAA requires local air quality management districts to develop and implement strategies to attain the CAAQS. For some pollutants, the CAAQS are more stringent than the NAAQS, and the CCAA mandated that the air quality management districts prepare air quality management plans that specify how both the federal and state standards would be met. The CAAQS are listed in Table 3.4-1: Ambient Air Quality Standards.

CARB regulates mobile emission sources in California, oversees the air districts, enforces the CAAQS, and works with the state's OEHHA in identifying TACs and enforcing rules related to TACs, including the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Enacted to identify TAC hot spots where emissions from specific sources may expose individuals to an elevated risk of adverse health effects, this law requires that a business or other establishment identified as a significant source of toxic emissions must provide the affected population with information about health risks posed by those emissions.

3.4.2.3 Regional

3.4.2.3.1 San Diego Air Pollution Control District

Air districts are primarily responsible for regulating stationary emission sources at industrial and commercial facilities within their respective geographic areas and for preparing the air quality plans that are required under the CAA and the CCAA. The SDAPCD is the primary agency responsible for planning, implementing, and enforcing federal and state ambient air quality standards in San Diego County. The SDAPCD has not established quantitative California Environmental Quality Act (CEQA) thresholds of significance for construction or mobile source-related emissions. The plans, rules, and regulations presented in the following subsections apply to all stationary emissions sources in the jurisdiction of the SDAPCD.

2022 Regional Air Quality Strategy

Originally adopted by the SDAPCD on June 30, 1992, the Regional Air Quality Strategy (RAQS) has historically addressed state O_3 standards as required by state law. It has been periodically updated as new measures become technologically feasible, improve air quality, or protect public health. Adopted measures have primarily reduced emissions of air pollutants, including VOCs and NO_x, that form O_3 from stationary sources such as industrial operations and manufacturing facilities.

The 2022 RAQS's proposed O_3 pollution control strategy includes additional VOC and NO_x control measures scheduled for review and possible adoption through 2026. Based on a preliminary evaluation, eight of the proposed measures are estimated to reduce VOCs by approximately 0.04 ton per day and NO_x by approximately 0.59 ton per day. These measures, if adopted or amended, will also reduce greenhouse gases (GHGs) and PM as a co-benefit, and will improve air quality in under-resourced communities. As part of the 2022 RAQS, the SDAPCD will pursue complementary and alternative strategies within the SDAPCD's regulatory authority to further reduce VOCs, NO_x, GHGs, and PM emissions over the next 3 years. These include exploring additional incentive funding opportunities, developing best practice documents,

enhancing regionwide outreach and education, developing strategic partnerships, and advocating for legislation as needed (SDAPCD 2022).

2020 Ozone Attainment Plan

The 2020 Ozone Attainment Plan for San Diego County demonstrates how the region will further reduce air pollutant emissions in order to attain the 75 ppb and 70 ppb O_3 standards by 2026 and 2032, respectively. The 2020 Ozone Attainment Plan includes, but is not limited to the following:

- regionwide inventories of O_3-forming emissions;
- a Reasonably Further Progress demonstration showing emissions reductions during the years leading to the attainment dates;
- an assessment of Reasonably Available Control Technology and Reasonably Available Control Measures;
- contingency measures in the event the emissions controls fall short of achieving the needed reductions; and
- other plan elements as required by the federal CAA (SDAPCD 2020).

Regulation IV – Prohibitions, Rule 50 – Visible Emissions

This rule prohibits any activity that will create air contaminant emissions darker than 20-percent opacity for more than an aggregate of 3 minutes in any consecutive 60-minute time period.

Regulation IV – Prohibitions, Rule 51 – Nuisance

This regulation prohibits any activity that will discharge air contaminants that cause or have a tendency to cause injury, detriment, nuisance or annoyance to people and the public, or damage to any business or property.

Regulation IV – Prohibitions, Rule 52 – Particulate Matter

This rule prohibits any person from discharging PM in excess of 0.10 grain per dry standard cubic foot (0.23 gram per dry standard cubic meter) of gas into the atmosphere from any source.

Regulation IV – Prohibitions, Rule 55 – Fugitive Dust Control

This regulation prohibits any activity that will discharge visible dust emissions into the atmosphere beyond the property line bounding the activity for more than 3 minutes during any 60-minute period. This regulation also prohibits visible roadway dust due to track-out or carry-out.

Regulation XV – Federal Conformity, Rule 1501

The federal conformity rule prohibits any federal actions that may be inconsistent with the SDAPCD's efforts to achieve attainment with the NAAQS.

3.4.2.3.2 San Diego Association of Governments 2021 Regional Plan

The San Diego Association of Governments (SANDAG) is a Metropolitan Planning Organization and council of governments that addresses the region's issues, including improving

equity, transportation, air quality, clean energy, economic development, goods movement, public health, public safety, housing, and more. In December 2021, SANDAG's Final 2021 Regional Plan was adopted. The Regional Plan provides a long-term blueprint for the region that seeks to meet regulatory requirements; address traffic congestion; and create equal access to jobs, education, healthcare, and other community resources. The Regional Plan combines the Regional Transportation Plan, Sustainable Communities Strategy (SCS), and Regional Comprehensive Plan. The Regional Plan complies with state and federal mandates, including an SCS, per Senate Bill 375, that achieves GHG emission reduction targets set by CARB; compliance with federal civil rights requirements (Title VI); and environmental justice considerations, air quality conformity, and a public participation process (SANDAG 2021). SANDAG released the Draft 2025 Regional Plan for public review on May 27, 2025. The Draft 2025 Regional Plan will be available for public review through July 18, 2025.

3.4.2.4 Local

3.4.2.4.1 County of San Diego

San Diego County General Plan

The Conservation and Open Space Element of the San Diego County General Plan discusses goals and policies to control the emission of air quality pollutants and GHGs in the region. The Conservation Element contains the following policies relating to air quality that are relevant to the Proposed Project (County of San Diego 2011b):

- **Policy COS-14.10: Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.

- **Policy COS-15.6: Design and Construction Methods.** Require development design and construction methods to minimize impacts to air quality.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed and no policies that are relevant to air quality for the Proposed Project were identified (County of San Diego 2020).

County of San Diego Municipal Code

Section 87.428 Dust Control Measures of the County's Municipal Code states that all clearing and grading must be carried out with dust control measures. These measures include watering, application of surfactants, shrouding, control of vehicle speeds, paving of access areas, or other operational or technological measures to reduce dispersion of dust (County of San Diego 2025).

County of San Diego Guidelines for Determining Significance for Air Quality

The County's Guidelines for Determining Significance for Air Quality provides guidance for evaluating the impacts that a proposed development project would have on air quality. Although the SDAPCD does not provide quantitative thresholds for determining the significance of construction or mobile source-related impacts, the County references the Air Quality Impact Analysis (AQIA) trigger levels for new or modified stationary sources from the SDAPCD's Regulation II, Rule 20.2. Although the AQIA trigger levels do not generally apply to mobile

sources or general land development projects, for comparative purposes these levels may be used to evaluate the increased emissions that would be discharged to the SDAB from proposed land development projects (County of San Diego 2007). Table 3.4-5: County Screening-Level Thresholds for Air Quality Impact Analysis details the County's thresholds for CAPs.

Table 3.4-5: County Screening-Level Thresholds for Air Quality Impact Analysis

Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
PM_{10}	NA	100	15
$PM_{2.5}$	NA	55	10
CO	100	550	100
NO_x	25	250	40
SO_x	25	250	40
VOCs[1]	NA	75	13.7[2]

Sources: County of San Diego 2007

Notes:

[1] SDAPCD Rules 20.2 and 20.3 do not have AQIA thresholds for VOCs. The screening level for VOCs was used as specified by the SCAQMD.

[2] The 13.7 tons per year threshold was based on 75 pounds per day multiplied by 365 days per year and divided by 2,000 pounds per ton.

3.4.2.4.2 City of El Cajon

City of El Cajon General Plan

The 2021 Safety Element of the City of El Cajon (City) General Plan contains policies and actions that aim to improve the air quality in the City. The following policy from the 2021 Safety Element is relevant to the Proposed Project (City of El Cajon 2021):

- **Policy 1.1:** Reduce air pollution from mobile sources.

City of El Cajon Municipal Code

Section 17.115.130 of the City Municipal Code outlines the air quality standards in the City. As stated in Section 17.115.130 (A)(2), "a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which will cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to animals, vegetation, business or property." As stated in Section 17.115.130 (A)(3), "no emission shall be permitted of odorous gases or other odorous matter in such quantities as to be readily detectable at the property line of the use from which such odor emits, or at the point of greatest concentration if further than the lot line."

3.4.3 Impact Analysis and Mitigation Measures

3.4.3.1 Analysis Methodology

As discussed in the County of San Diego Guidelines for Determining Significance for Air Quality, the SDAPCD does not provide quantitative thresholds for determining the significance of construction or mobile source-related impacts. Therefore, impacts to air quality within the Proposed Project Area were determined by comparing the anticipated emissions from the construction and the O&M phases of the Proposed Project to applicable emissions thresholds established by the County and City. Table 2-9: Proposed Construction Schedule in Chapter 2 – Project Description provides the complete construction schedule outlined by construction activity. Emissions were calculated for the following sources for the construction phase of the Proposed Project:

- exhaust emissions from off-road equipment use,
- exhaust emissions from on-road vehicle travel,
- entrained road dust emissions from on-road vehicle travel on paved and unpaved roads, and
- fugitive dust emissions from earthwork activities, and
- exhaust and dust emissions from helicopter use.

Emissions were calculated for the following sources for the O&M phase of the Proposed Project:

- exhaust emissions from on-road vehicle travel,
- entrained road dust emissions from on-road vehicle travel,
- exhaust and dust emissions from helicopter use.

As documented in Attachment 3.4-B: Air Quality and GHG Calculations, the emissions estimates were generated using the methods established in version 2022.1 of the California Emissions Estimator Model, CARB's Emission Factor model, and Swiss Federal Office of Civil Aviation (FOCA) Guidance on the Determination of Helicopter Emissions.[5] As discussed in Section 1.2 Emissions Inputs of Attachment 3.4-B: Air Quality and GHG Calculations, Proposed Project construction was split up into eight separate construction activities. Due to the varying nature of the anticipated equipment requirements throughout the construction process for each main Proposed Project component, the construction process was further separated into 23 unique phases of construction. More specifically, the Suncrest Substation Modifications, 230 kV UG Segment, and 230 kV OH Segment were split into three, four, and 10 construction phases, respectively, in the detailed calculations. The Site and ROW Restoration phase was also split by the proposed 230 kV UG and OH segments in the detailed calculations. Unless otherwise specified, off-road equipment, on-road vehicles, and helicopters were assumed to operate for the entire duration of the phase. Work was assumed to occur every day of the week except Sundays and federal holidays. Each unique phase of construction and its associated activities, equipment, and equipment usage are shown in Table 15 of Attachment 3.4-B: Air Quality and GHG Calculations.

[5] The Swiss FOCA emission factors were used in lieu of other factors provided by the U.S EPA or FAA. These factors are included in Tables 33 and 34 of Attachment 3.4-B: Air Quality and GHG Calculations.

On-road vehicle distances were assumed to be 20 miles for each one-way vehicle trip (the approximate distance from the City of El Cajon to the easternmost section of the Proposed Project). The paved and unpaved road distances for each trip type were estimated using aerial imagery as documented in Table 16 of Attachment 3.4-B: Air Quality and GHG Calculations. Unless specified, each vehicle was assumed to make one round trip each day.

Fugitive dust emissions were calculated during all off-road equipment use for motor graders and scrapers. Off-road equipment assumptions are documented in Table 15 of Attachment 3.4-B: Air Quality and GHG Calculations and were provided by SDG&E. Fugitive dust control measures, consistent with SDAPCD Rule 55, would be implemented during Proposed Project construction activities that have the potential to create fugitive dust or in inactive construction areas that have exposed soils. This could include but not be limited to watering or treating disturbed areas with a dust suppressant, requiring all haul trucks to maintain a minimum of at least 2 feet of freeboard or cover all loads; and requiring vehicles and equipment to maintain a speed limit of 15 mph on Proposed Project-specific construction routes and within temporary work areas. Because SDG&E would comply with SDAPCD Rule 55, dust control measures were included in the analysis to determine the controlled construction fugitive dust emissions.

Material hauling trips by flatbed trucks, dump trucks, and haul trucks are accounted for in phases S-02 through S-05, S-14 through S-19, and S-22 through S-23 as shown in Table 15 of Attachment 3.4-B: Air Quality and GHG Calculations.

As depicted in Attachment 3.4-A: Sensitive Receptors within 1,000 Feet of the Proposed Project, aerial photographs were also used to identify potential sensitive receptors for their potential exposure to pollutants and odors. Detailed information on construction activities, equipment usage, vehicle trips, and the emission calculations are provided in Attachment 3.4-B: Air Quality and GHG Calculations.

3.4.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to air quality.

3.4.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For air quality, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Conflict with or obstruct implementation of the applicable air quality plan?
- Result in a cumulatively considerable net increase of any CAP for which the project region is nonattainment under an applicable federal or state ambient air quality standard?
- Expose sensitive receptors to substantial pollutant concentrations?
- Result in other emissions (e.g., those leading to odors) adversely affecting a substantial number of people?

The thresholds of significance used to determine if the Proposed Project would result in a cumulatively considerable net increase of a CAP are provided in Table 3.4-5: County Screening-Level Thresholds for Air Quality Impact Analysis.

As discussed in Section 3.4.2.3.1 San Diego Air Pollution Control District, any activity that will discharge air contaminants that cause or have a tendency to cause injury, detriment, nuisance or annoyance to people and the public, or damage to any business or property is prohibited.

3.4.3.4 Impact Analysis

3.4.3.4.1 Impact AIR-01: Would the project conflict with or obstruct implementation of an applicable air quality plan?

Construction

No Impact. The SDAPCD is the agency responsible for managing local air quality, administering California and federal air pollution control programs, and ensuring attainment and maintenance of the ambient air quality standards. The SDAPCD established air quality plans to address nonattainment areas. A project would be considered inconsistent with an air quality plan or applicable attainment plan if it could cause population and/or employment growth or growth in vehicle miles traveled in excess of the growth forecasts included in an applicable air quality plan or attainment plan. Because construction of the Proposed Project would not result in population growth, it would not conflict with the growth projections used in the development of the applicable air quality plans. Section 3.15 Population and Housing provides a more detailed discussion of economic and population growth associated with the Proposed Project.

Annual emissions associated with Proposed Project construction would be temporary and would represent a small fraction of the regional emission inventories included in the applicable air quality plans. Construction of the Proposed Project would be performed in compliance with applicable air district rules and regulations, ensuring that activities would be consistent with air district efforts to achieve attainment and maintenance of the standards. The Proposed Project-related annual emissions occurring in compliance with these rules and regulations would not conflict with or obstruct implementation of the applicable air quality plans.

Because the Proposed Project's annual construction emissions are not expected to substantially contribute to regional emissions and would not conflict with the growth projections in the applicable air quality plans, and because construction of these components would be performed in compliance with applicable air district rules and regulations, the construction of the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plans. As a result, no impact would occur.

Operations and Maintenance

No Impact. Typical O&M activities would involve routine inspections and preventive maintenance to maintain service reliability, as well as emergency work to maintain or restore service. Anticipated O&M activities may include access road maintenance and repair; transmission line repair, replacement, and reconductoring; insulator washing; repair and replacement of substation components; and vegetation management. Routine O&M activities would require one trip per year by crews of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. If no vehicle access exists, the crew and material would be flown in by helicopter.

Overall, the Proposed Project components would result in nominal equipment and vehicle use during O&M activities, such as maintenance and inspection trips. These activities would result in a minor incremental increase in regional emissions. As a result, these emissions would not affect the inventories included in the applicable air quality plans and would be consistent with SDAPCD efforts to achieve attainment and maintenance of the standards. Therefore, no impact would occur from O&M of the Proposed Project.

3.4.3.4.2 Impact AIR-02: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Construction

Less-than-Significant Impact. Construction of the Proposed Project would require the use of off-road construction equipment, on-road vehicles, one light-duty helicopter, and one heavy-duty helicopter, as itemized in Attachment 2-B: Proposed Construction Equipment and Workforce in Chapter 3 – Project Description. Table 3.4-6: Proposed Project Annual Uncontrolled Construction Emissions by Source and Table 3.4-7: Proposed Project Annual Controlled Construction Emissions by Source summarize the anticipated annual uncontrolled and controlled construction emissions, respectively, by emission source. Table 3.4-8: Proposed Project Annual Construction Emissions summarizes the anticipated annual construction emissions across all emission sources for each year of construction, and Table 3.4-9: Proposed Project Daily Construction Emissions summarizes the anticipated daily construction emissions across all sources.

As shown in Table 3.4-8: Proposed Project Annual Construction Emissions and Table 3.4-9: Proposed Project Daily Construction Emissions, uncontrolled emissions would exceed applicable thresholds for PM_{10}. All other emissions would be below applicable thresholds. To reduce these construction emissions, fugitive dust control measures, consistent with SDAPCD Rule 55, would be implemented during Proposed Project construction activities that have the potential to create fugitive dust or in inactive construction areas that have exposed soils. This could include but not be limited to watering or treating disturbed areas with a dust suppressant, requiring all haul trucks to maintain a minimum of at least 2 feet of freeboard or cover all loads; and requiring vehicles and equipment to maintain a speed limit of 15 mph on Proposed Project-specific construction routes and within temporary work areas. As shown in Table 3.4-8: Proposed Project Annual Construction Emissions and Table 3.4-9: Proposed Project Daily Construction Emissions, with the implementation of dust control measures, controlled construction emissions would not exceed the significance thresholds for any CAPs. As a result, impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. As previously described, the Proposed Project would result in nominal equipment and vehicle use during O&M activities, such as maintenance and inspection trips. If no vehicle access exists, a helicopter would be used to conduct regular O&M activities. In addition, the Proposed Project components would be unstaffed and controlled remotely. The anticipated annual emissions from regular O&M activities of the Proposed Project were estimated and summarized in Table 3.4-10: Proposed Project Annual O&M Emissions. As shown, the anticipated emissions would be well below all applicable thresholds, and impacts would be less than significant.

Table 3.4-6: Proposed Project Annual Uncontrolled Construction Emissions by Source

Emission Source	Annual Construction Emissions (tons)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
2027						
Off Road Equipment	0.03	0.03	1.84	1.23	< 0.01	0.16
On Road Vehicles	0.01	0.01	0.33	0.11	< 0.01	0.02
On Road Dust	2.25	0.24	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**2.30**	**0.27**	**2.16**	**1.35**	**< 0.01**	**0.18**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2028						
Off Road Equipment	0.36	0.33	11.81	10.18	0.03	1.28
On Road Vehicles	0.13	0.07	4.27	1.35	0.02	0.29
On Road Dust	28.74	3.02	0.00	0.00	0.00	0.00
Helicopter Use	2.13	0.77	5.18	4.40	0.06	3.55
Earth Moving	1.00	0.51	0.00	0.00	0.00	0.00
Total	**32.36**	**4.71**	**21.27**	**15.93**	**0.10**	**5.12**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	**Yes**	No	No	No	No	No
2029						
Off Road Equipment	0.41	0.38	12.83	10.75	0.03	1.35
On Road Vehicles	0.11	0.06	3.26	1.12	0.01	0.23
On Road Dust	22.56	2.37	0.00	0.00	0.00	0.00
Helicopter Use	0.05	0.01	0.11	0.30	< 0.01	0.24
Earth Moving	0.31	0.16	0.00	0.00	0.00	0.00
Total	**23.45**	**2.98**	**16.20**	**12.16**	**0.04**	**1.83**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	**Yes**	No	No	No	No	No

Emission Source	Annual Construction Emissions (tons)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
2030						
Off Road Equipment	0.22	0.20	7.99	6.16	0.02	0.76
On Road Vehicles	0.06	0.03	2.01	0.39	0.01	0.14
On Road Dust	13.61	1.43	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**13.88**	**1.67**	**10.00**	**6.55**	**0.02**	**0.91**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2031						
Off Road Equipment	0.19	0.18	4.49	4.11	0.01	0.48
On Road Vehicles	0.06	0.03	1.86	0.47	0.01	0.13
On Road Dust	12.70	1.34	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**12.95**	**1.55**	**6.35**	**4.58**	**0.02**	**0.61**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2032						
Off Road Equipment	0.09	0.08	2.41	2.14	0.01	0.24
On Road Vehicles	0.04	0.03	1.31	0.24	< 0.01	0.10
On Road Dust	9.41	0.99	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**9.54**	**1.10**	**3.72**	**2.38**	**0.01**	**0.34**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No

Note: Each year of construction includes all or a portion of the following construction activities, as defined in Attachment 3.4-B: Air Quality and GHG Calculations:

- 2027: Survey and Staking, Utility Locates, and Mobilization (S-01 through S-03)
- 2028: Survey and Staking, Utility Locates, Access Road Construction, Conventional Structure Foundation Installation, Conventional Structure Installation, Helicopter Support, Helicopter Landing Pad Construction, Helicopter Landing Platform Construction, Helicopter Site Preparation, Helicopter Structure Foundation Installation, Helicopter Structure

Installation, Existing Suncrest Substation Site Preparation, and Existing Suncrest Substation Below-Grade Construction (S-01, S-02, S-04 through S-12, S-18, and S-19)

- 2029: Survey and Staking, Utility Locates, Conventional Structure Foundation Installation, Conventional Structure Installation, Conductor Installation, Excavate Trench, Duct Bank and Conduit Installation, Existing Suncrest Substation Below-Grade Construction, Existing Suncrest Substation Above-Grade Construction, and Site and Right-of-Way (ROW) Restoration (S-01, S-02, S-05, S-06, S-13 through S-15, S-19, S-20, and S-22)
- 2030: Survey and Staking, Utility Locates, Excavate Trench, Duct Bank and Conduit Installation, Cable Installation, Existing Suncrest Substation Above-Grade Construction, and Site and ROW Restoration (S-01, S-02, S-14 through S-16, S-20, and S-23)
- 2031: Survey and Staking, Utility Locates, Paving, Existing Suncrest Substation Above-Grade Construction, Site and ROW Restoration (S-01, S-02, S-17, S-20, and S-23)
- 2032: Existing Suncrest Substation Above-Grade Construction and Commissioning and Testing (S-20 and S-21)

Table 3.4-7: Proposed Project Annual Controlled Construction Emissions by Source

Emission Source	Annual Construction Emissions (tons)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
2027						
Off Road Equipment	0.03	0.03	1.84	1.23	< 0.01	0.16
On Road Vehicles	0.01	0.01	0.33	0.11	< 0.01	0.02
On Road Dust	0.63	0.07	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**0.67**	**0.11**	**2.16**	**1.35**	**< 0.01**	**0.18**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2028						
Off Road Equipment	0.36	0.33	11.81	10.18	0.03	1.28
On Road Vehicles	0.13	0.07	4.27	1.35	0.02	0.29
On Road Dust	8.02	0.96	0.00	0.00	0.00	0.00
Helicopter Use	2.13	0.77	5.18	4.40	0.06	3.55
Earth Moving	0.39	0.20	0.00	0.00	0.00	0.00
Total	**11.03**	**2.33**	**21.27**	**15.93**	**0.10**	**5.12**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2029						
Off Road Equipment	0.41	0.38	12.83	10.75	0.03	1.35
On Road Vehicles	0.11	0.06	3.26	1.12	0.01	0.23
On Road Dust	6.27	0.74	0.00	0.00	0.00	0.00
Helicopter Use	0.05	0.01	0.11	0.30	0.00	0.24
Earth Moving	0.12	0.06	0.00	0.00	0.00	0.00
Total	**6.97**	**1.26**	**16.20**	**12.16**	**0.04**	**1.83**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No

Emission Source	Annual Construction Emissions (tons)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
2030						
Off Road Equipment	0.22	0.20	7.99	6.16	0.02	0.76
On Road Vehicles	0.06	0.03	2.01	0.39	0.01	0.14
On Road Dust	3.80	0.45	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**4.08**	**0.69**	**10.00**	**6.55**	**0.02**	**0.91**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2031						
Off Road Equipment	0.19	0.18	4.49	4.11	0.01	0.48
On Road Vehicles	0.06	0.03	1.86	0.47	0.01	0.13
On Road Dust	3.54	0.42	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**3.79**	**0.63**	**6.35**	**4.58**	**0.02**	**0.61**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No
2032						
Off Road Equipment	0.09	0.08	2.41	2.14	0.01	0.24
On Road Vehicles	0.04	0.03	1.31	0.24	< 0.01	0.10
On Road Dust	2.61	0.31	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00	0.00	0.00
Total	**2.75**	**0.42**	**3.72**	**2.38**	**0.01**	**0.34**
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No

Note: Each year of construction includes all or a portion of the following construction activities, as defined in Attachment 3.4-B: Air Quality and GHG Calculations:

- 2027: Survey and Staking, Utility Locates, and Mobilization (S-01 through S-03)
- 2028: Survey and Staking, Utility Locates, Access Road Construction, Conventional Structure Foundation Installation, Conventional Structure Installation, Helicopter Support, Helicopter Landing Pad Construction, Helicopter Landing Platform Construction, Helicopter Site Preparation, Helicopter Structure Foundation Installation, Helicopter Structure

Installation, Existing Suncrest Substation Site Preparation, and Existing Suncrest Substation Below-Grade Construction (S-01, S-02, S-04 through S-12, S-18, and S-19)

- 2029: Survey and Staking, Utility Locates, Conventional Structure Foundation Installation, Conventional Structure Installation, Conductor Installation, Excavate Trench, Duct Bank and Conduit Installation, Existing Suncrest Substation Below-Grade Construction, Existing Suncrest Substation Above-Grade Construction, and Site and Right-of-Way (ROW) Restoration (S-01, S-02, S-05, S-06, S-13 through S-15, S-19, S-20, and S-22)
- 2030: Survey and Staking, Utility Locates, Excavate Trench, Duct Bank and Conduit Installation, Cable Installation, Existing Suncrest Substation Above-Grade Construction, and Site and ROW Restoration (S-01, S-02, S-14 through S-16, S-20, and S-23)
- 2031: Survey and Staking, Utility Locates, Paving, Existing Suncrest Substation Above-Grade Construction, Site and ROW Restoration (S-01, S-02, S-17, S-20, and S-23)
- 2032: Existing Suncrest Substation Above-Grade Construction and Commissioning and Testing (S-20 and S-21)

Table 3.4-8: Proposed Project Annual Construction Emissions

Emission Scenario	Projected Emissions (tons per year)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
Uncontrolled Emissions						
2027	2.3	0.3	2.2	1.3	< 0.1	0.2
2028	**32.4**	4.7	21.3	15.9	0.1	5.1
2029	**23.4**	3.0	16.2	12.2	< 0.1	1.8
2030	13.9	1.7	10.0	6.5	< 0.1	0.9
2031	13.0	1.5	6.4	4.6	< 0.1	0.6
2032	9.5	1.1	3.7	2.4	< 0.1	0.3
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	**Yes**	No	No	No	No	No
Controlled Emissions						
2027	0.7	0.1	2.2	1.3	< 0.1	0.2
2028	11.0	2.3	21.3	15.9	0.1	5.1
2029	7.0	1.3	16.2	12.2	< 0.1	1.8
2030	4.1	0.7	10.0	6.5	< 0.1	0.9
2031	3.8	0.6	6.4	4.6	< 0.1	0.6
2032	2.7	0.4	3.7	2.4	< 0.1	0.3
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No

Note: Values shown in bold text exceed the applicable threshold.

Table 3.4-9: Proposed Project Daily Construction Emissions

Emission Scenario	Projected Emissions (pounds per day)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
Uncontrolled	**258.8**	38.4	171.2	128.0	0.8	44.6
Threshold	100	55	550	250	250	75
Exceeded?	**Yes**	No	No	No	No	No
Controlled	89.2	19.0	171.2	128.0	0.8	44.6
Threshold	100	55	550	250	250	75
Threshold Exceeded?	No	No	No	No	No	No

Note: Values shown in bold text exceed the applicable threshold.

Table 3.4-10: Proposed Project Annual O&M Emissions

Activity	Projected Emissions (tons per year)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
On-Road Vehicles	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Helicopters	0.018	0.004	0.099	0.038	< 0.001	0.079
Total	0.018	0.004	0.099	0.038	0.001	0.079
Threshold	15	10	100	40	40	13.7
Threshold Exceeded?	No	No	No	No	No	No

Note: Up to 10 flights by helicopters have been included for regular O&M activities. Each flight would last up to 10 hours.

3.4.3.4.3 Impact AIR-03: Would the project expose sensitive receptors to substantial pollutant concentrations?

Construction

Less-than-Significant Impact. As described previously, six residences within 100 feet of the proposed 230 kV western UG segment and four residences within 300 feet of the proposed 230 kV OH segment are the nearest sensitive receptors to the Proposed Project. Sensitive receptors located in proximity to Proposed Project components may be subject to incremental increases in CAP concentrations primarily resulting from fugitive dust emissions generated during earth-moving operations and vehicular movement on unpaved access roads. However, due to the linear aspect of the Proposed Project, construction activities would not remain in one location for extended periods and would typically last less than 2 weeks at each location. Although the proposed Hospital, Greenfield, and High Glen staging yards would be within 1,000 feet of sensitive receptors during the duration of Proposed Project construction, minimal construction activities would occur at the proposed staging yards as they would predominantly be used for equipment receiving, staging, and worker parking. In addition, the proposed High Glen fly yard would predominately be used for helicopter landing and material pick up.

The California Office of Environmental Health Hazard Assessment (OEHHA) identifies 2 months (or approximately 60 days) as an appropriate metric for evaluating short-term exposure in certain health risk assessments, particularly for construction-related activities. According to the OEHHA 2015 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, exposures lasting less than 2 months are considered acute or short-term and are evaluated differently from chronic exposures. Given the linear nature of the Proposed Project, construction activities would not stay in one location for more than 2 months and minimal construction activities would occur at the proposed staging/fly yards, thus limiting the exposure on sensitive receptors. Because of these factors, a health risk assessment was not conducted for the Proposed Project. Impacts from pollutant concentrations to sensitive receptors would be less than significant due to the short-term nature of construction activities in one location.

In addition, as shown in Table 3.4-9: Proposed Project Daily Construction Emissions, other than PM_{10}, all emissions would be below applicable significance thresholds. Section 3.4.3.4.2 further discusses the countermeasures that will be taken to reduce construction emissions. Construction would be completed by multiple construction crews dispersed across the Proposed Project; therefore, the actual emissions that would be created at a single site would likely be lower than the overall Proposed Project emissions. In addition, because the proposed 230 kV western UG segment would occur within paved roadways, fugitive dust emissions associated with excavation and backfill are anticipated to be lower than those associated with cross-country areas. Further, dust control measures consistent with SDAPCD Rule 55 would reduce fugitive dust emissions. Impacts from pollutant concentrations would be less than significant due to the separation between construction activities and the sensitive receptor.

Operations and Maintenance

No Impact. As described previously, six residences within 100 feet of the proposed 230 kV western UG segment and four residences within 300 feet of the proposed 230 kV OH segment are the nearest sensitive receptors to the Proposed Project. As shown in Table 3.4-10: Proposed

Project Annual O&M Emissions, all emissions would be below applicable SDAPCD thresholds. Routine O&M activities would require one trip per year by crews of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. If no vehicle access exists, a helicopter would be used to conduct regular O&M activities. Typical O&M activities would last less than a single day at each structure location, resulting in limited emissions in the vicinity of the sensitive receptor. Due to limited emissions associated with these activities and the short-term nature of O&M activities, no impact would occur.

3.4.3.4.4 Impact AIR-04: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Less-than-Significant Impact. The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While most offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generate citizen complaints to local governments and regulatory agencies. During construction, odor emissions could be generated by diesel-powered construction equipment and vehicles. Such odors would be short term and limited to the immediate vicinity of the activity. These emissions would be temporary in nature and disperse quickly. As a result, these emissions would not be considered significant. No other substantial sources of odor would be present during construction activities. As a result, impacts would be less than significant.

Operations and Maintenance

No Impact. O&M activities may create temporary odors from the combustion of fuel associated with heavy equipment, on-road vehicle, and helicopter use. Because O&M activities are currently conducted in this area and would be limited in duration (i.e., typically lasting 1 day at each structure location), odor from fuel combustion would disperse quickly. As a result, no impact would occur.

3.4.4 References

CARB. 2023. Maps of State and Federal Area Designations. Online. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Site visited April 2025.

CARB. 2024. Table of Ambient Air Quality Standards. Online. https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Site visited April 2025.

CARB. 2025a. Hydrogen Sulfide & Health. Online. https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health. Site visited April 2025.

CARB. 2025b. Sulfate & Health. Online. https://ww2.arb.ca.gov/resources/sulfate-and-health. Site visited April 2025.

CARB. 2025c. Vinyl Chloride & Health. Online. https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Site visited April 2025.

CARB. 2025d. Visibility-Reducing Particles & Health. Online. https://ww2.arb.ca.gov/resources/visibility-reducing-particles-and-health. Site visited April 2025.

CARB. 2025e. iADAM: Air Quality Data Statistics. Online. https://www.arb.ca.gov/adam/. Site visited April 2025.

City of El Cajon. 2021. City of El Cajon General Plan Safety Element. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

City of El Cajon. 2025. Municipal Code, Section 17.115.130. Online. https://ecode360.com/44374836?searchId=4981644241454088&highlight=noise&highlight=disturbs+the+peace#44374836. Site visited August 2025.

County of San Diego. 2007. Guidelines for Determining Significance for Air Quality. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf. Site visited May 2025.

County of San Diego. 2011a. Section 2.3 Air Quality of the San Diego County General Plan Update EIR. Online. https://www.sandiegocounty.gov/content/sdc/pds/gpupdate/environmental.html. Site visited April 2025.

County of San Diego. 2011b. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County of San Diego. 2020. Alpine Draft Community Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/CommunityGroups/AlpineCommunityPlanUpdate.html. Site visited December 2025.

County of San Diego. 2025. Code of Regulatory Ordinances, Section 87.428 Dust Control Measures. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-88215. Site visited April 2025.

NOAA. 2025. NOWData. Online. https://www.weather.gov/wrh/Climate?wfo=sgx. Site visited April 2025.

RAWS Climate Archive. 2025. Miramar East California. Online. https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCMIS. Site visited April 2025.

Sacramento Metropolitan Air Quality Management District. 2025. Air Quality Pollutants and Standards. Online. https://www.airquality.org/air-quality-health/air-quality-pollutants-and-standards. Site visited May 2025.

SANDAG. 2021. 2021 Regional Plan. Online. https://www.sandag.org/regional-plan/2021-regional-plan. Site visited April 2025.

SDAPCD. 2020. 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone. Online. https://www.sdapcd.org/content/sdapcd/planning.html. Site visited April 2025.

SDAPCD. 2022. 2022 Regional Air Quality Strategy. Online. https://www.sdapcd.org/content/sdapcd/planning.html. Site visited April 2025.

U.S. EPA. 2025. Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act. Online. https://www.epa.gov/stationary-sources-air-pollution/reclassification-major-sources-area-sources-under-section-112. Site visited November 2025.

U.S. EPA. 2024. Basic Information about Lead Air Pollution. Online. https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution. Site visited April 2025.

USFS. 2005. Land Management Plan, Part 2 Cleveland National Forest Strategy. Online. https://www.fs.usda.gov/r05/cleveland/planning. Site visited April 2025.

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ATTACHMENT 3.4-A: SENSITIVE RECEPTORS WITHIN 1,000 FEET OF THE PROPOSED PROJECT

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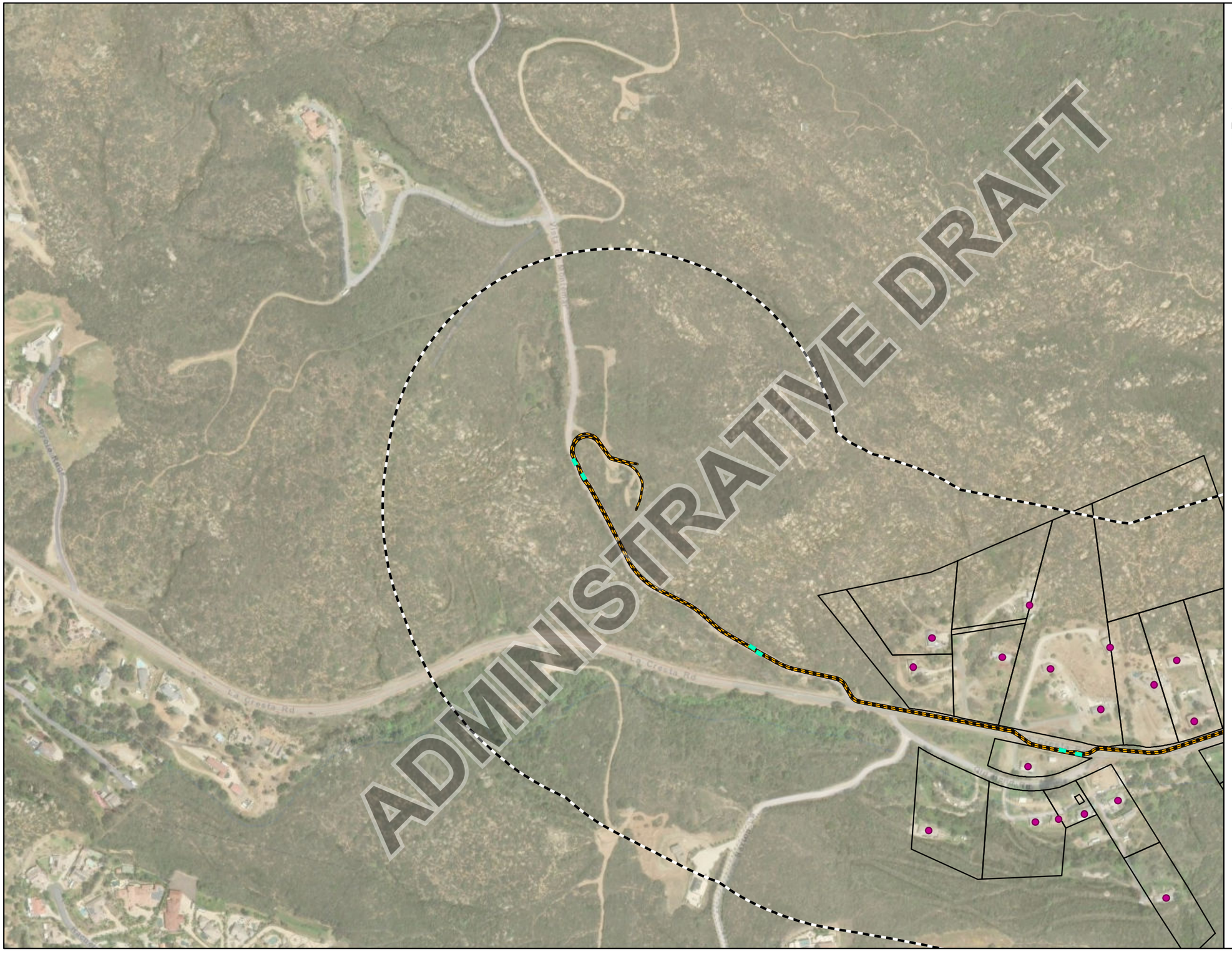


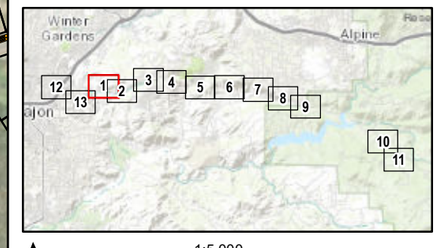
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 1 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- Vault

Sensitive Receptor

- Potential Residential Building
- Parcel Lines



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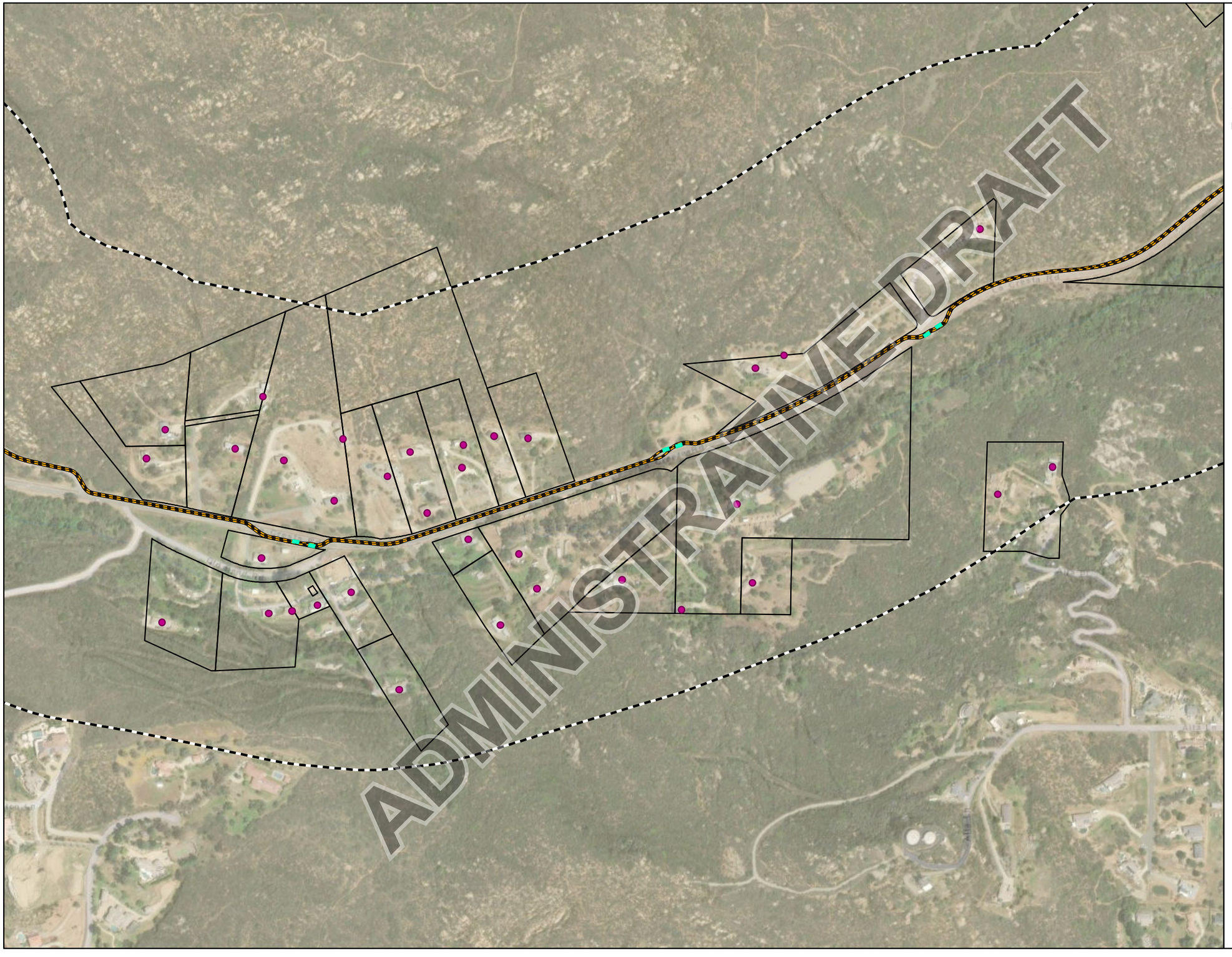


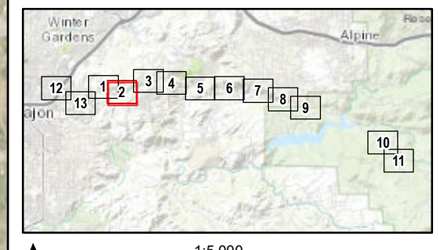
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 2 of 13

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV Western UG Segment
1000 Foot Buffer
Vault

Sensitive Receptor

Potential Residential Building
Parcel Lines



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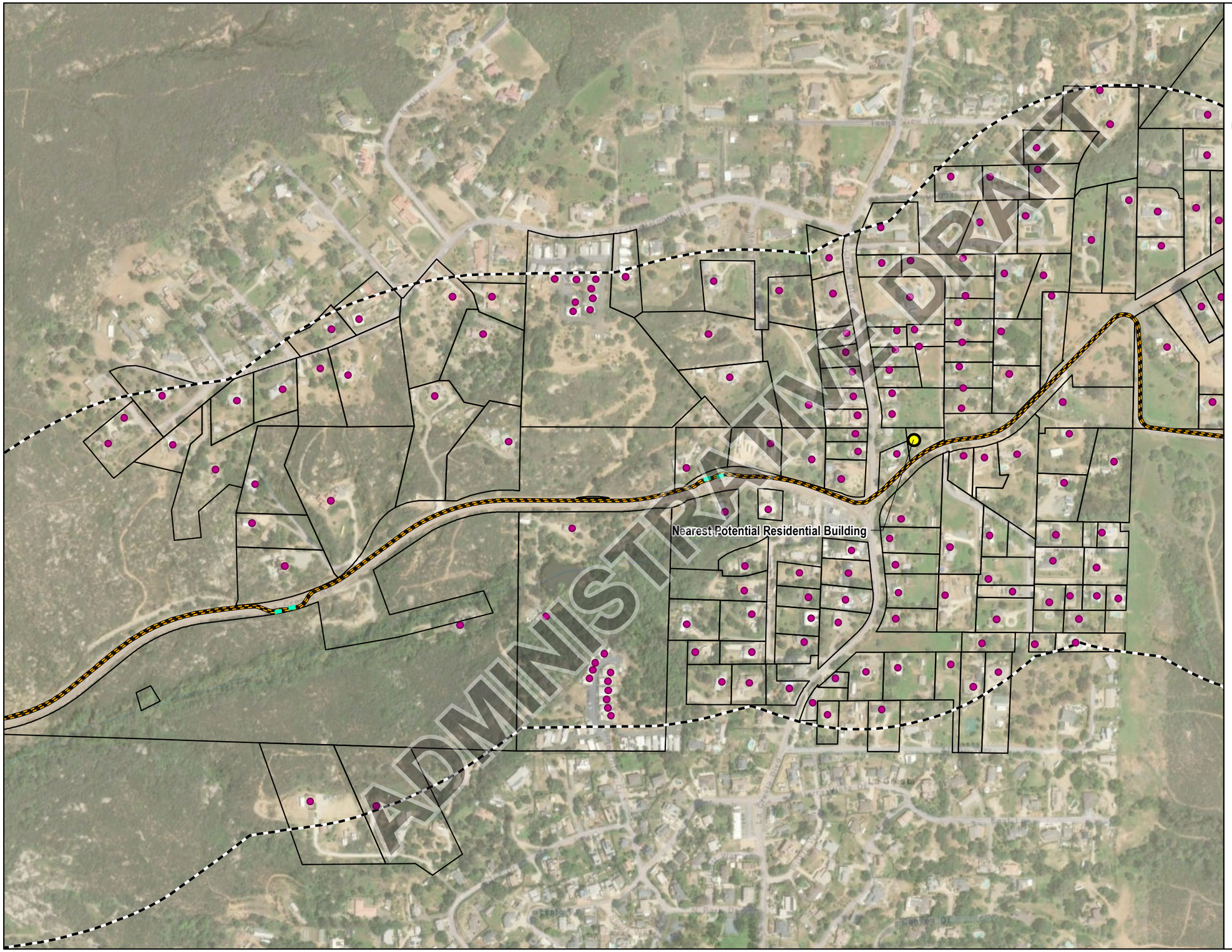


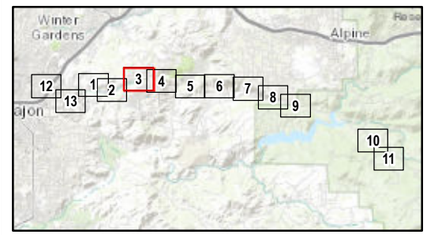
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 3 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- Vault

Sensitive Receptor

- Potential Residential Building
- Potential Residential Building Nearest Proposed UG Segment
- Parcel Lines



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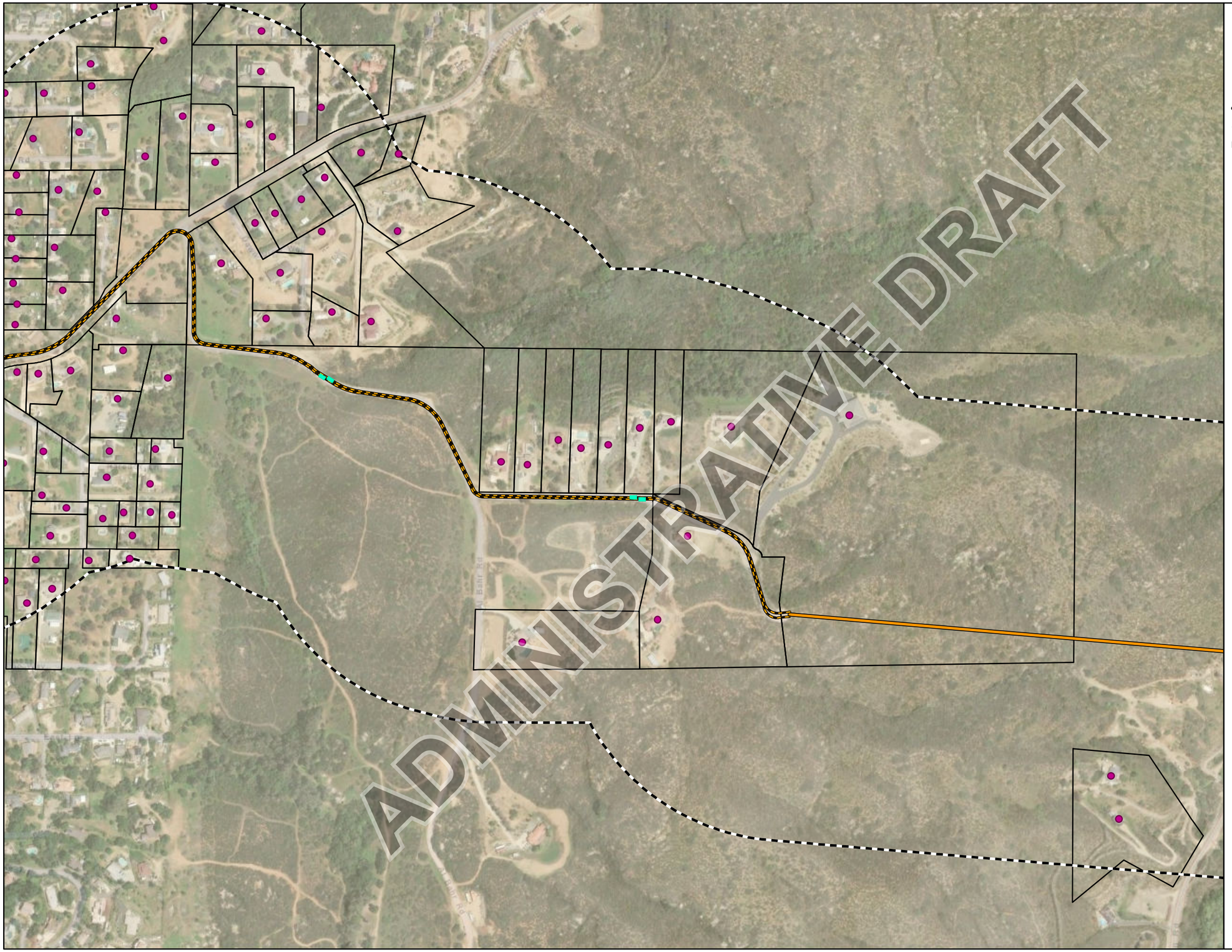


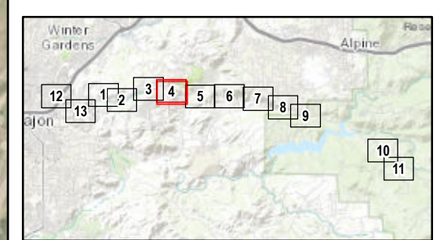
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 4 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- Vault

Sensitive Receptor

- Potential Residential Building
- Parcel Lines



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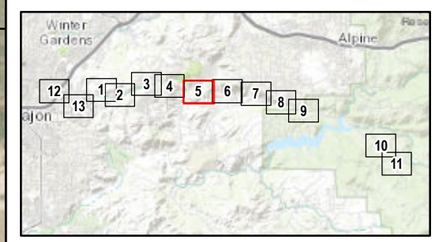
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 5 of 13

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building
Parcel Lines



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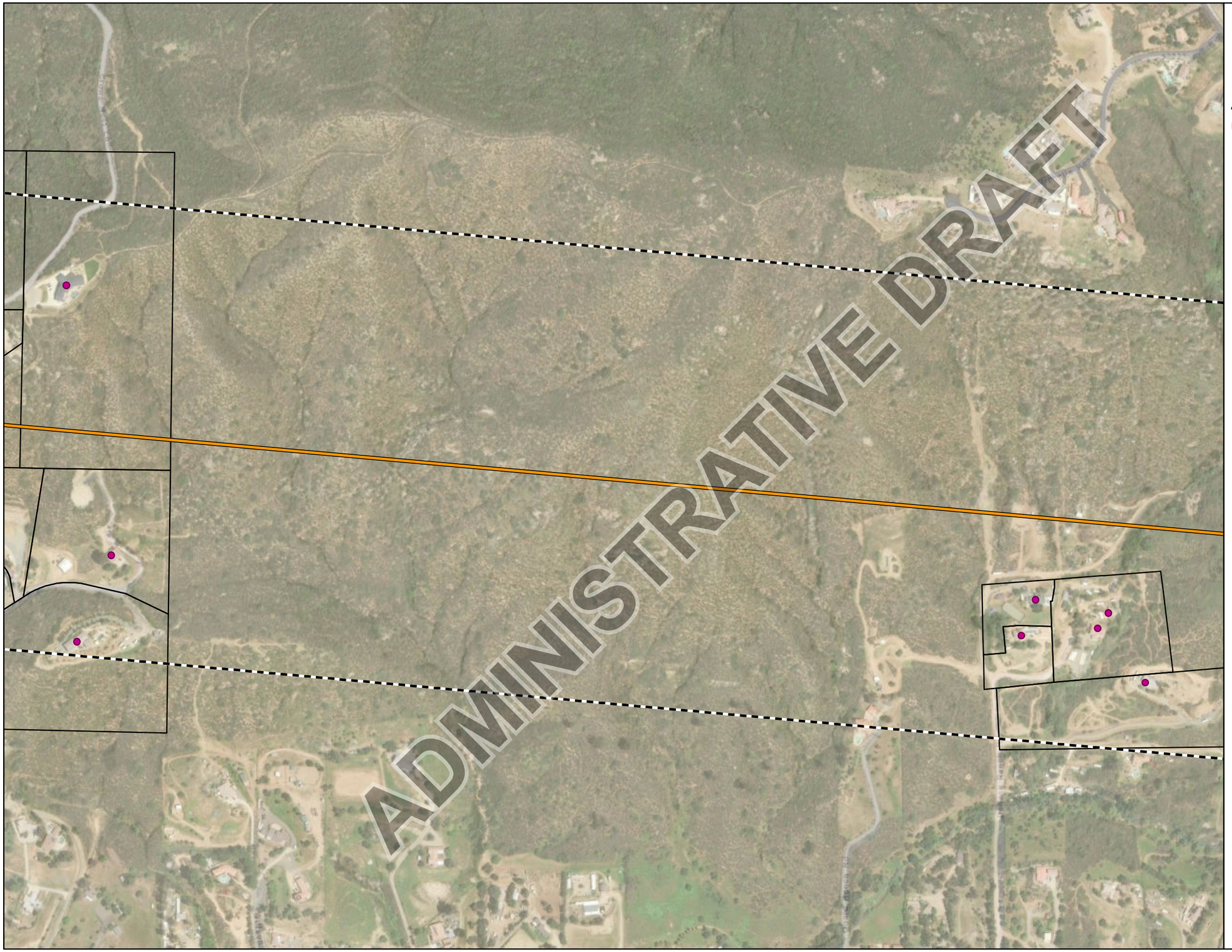


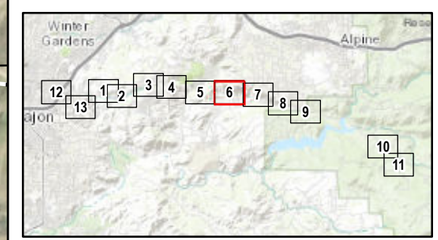
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 6 of 13

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building
Parcel Lines



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Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 7 of 13

Suncrest
230 Kilovolt Loop-In Project

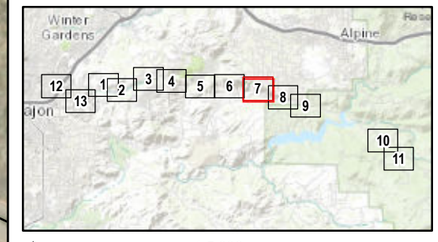
Proposed 230 kV OH Segment

1000 Foot Buffer

Sensitive Receptor

Potential Residential Building

Parcel Lines



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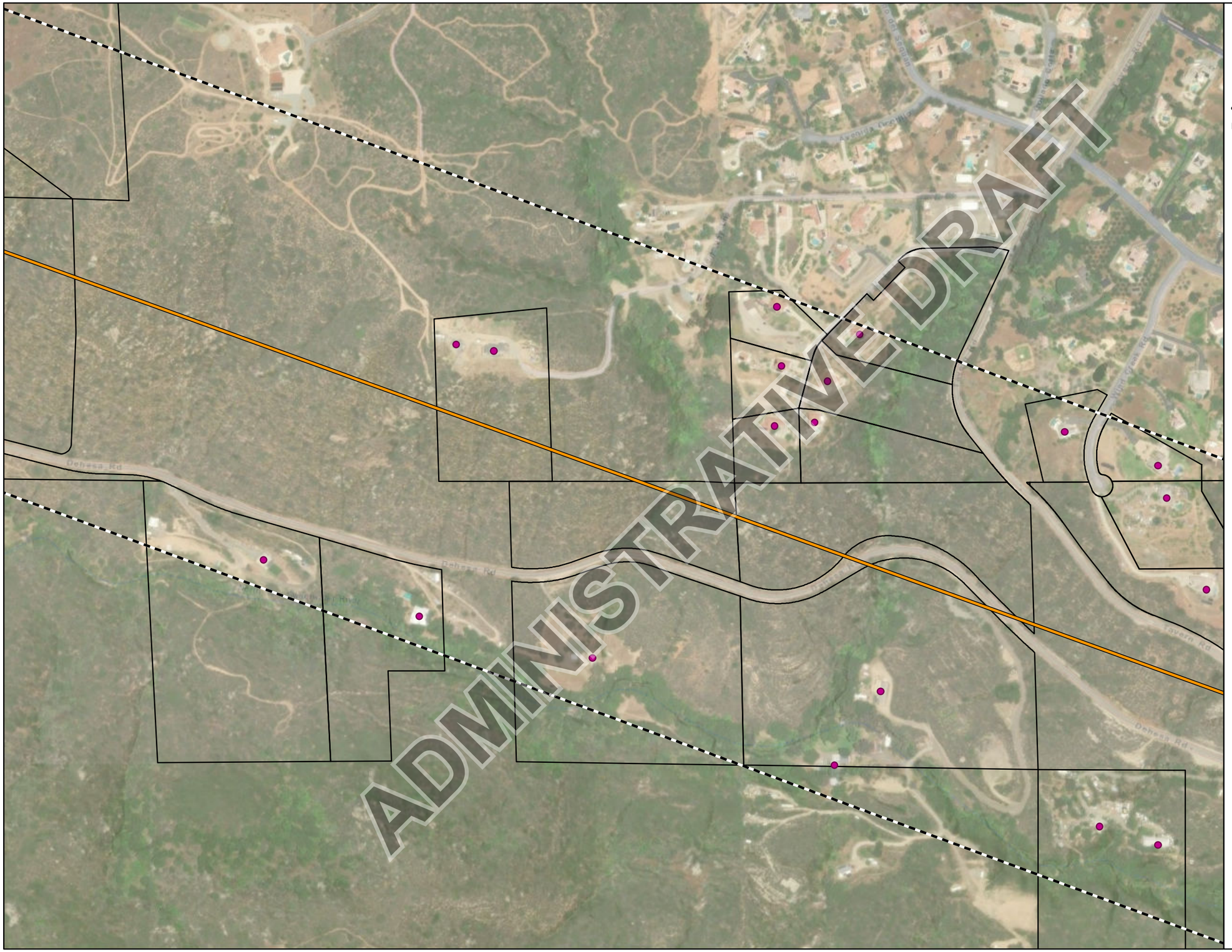


ADMINISTRATIVE DRAFT

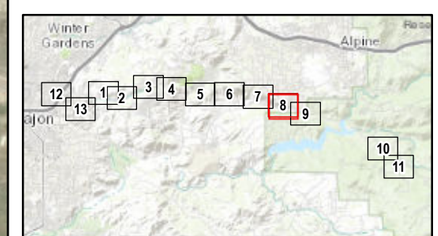
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 8 of 13

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building
Parcel Lines



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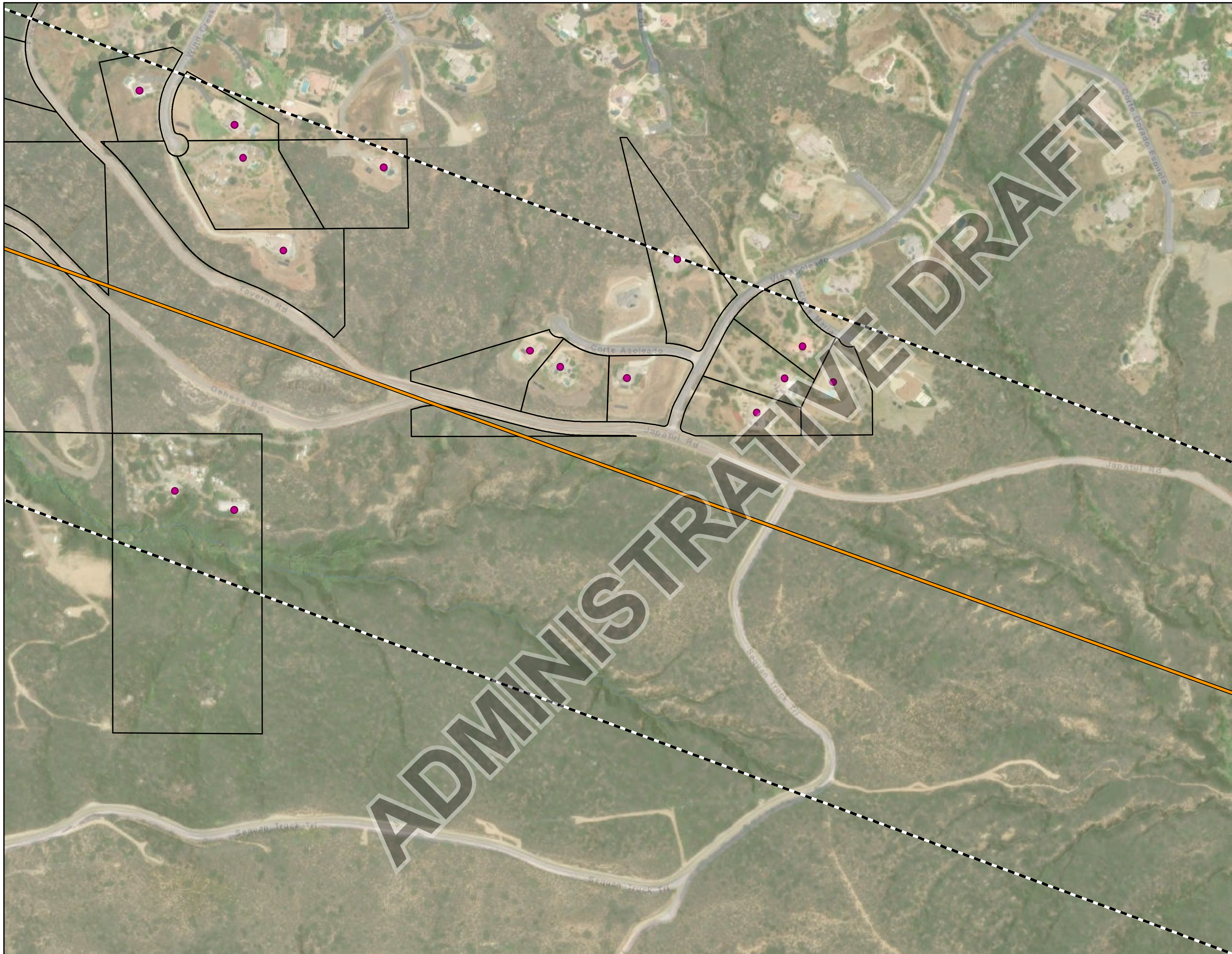


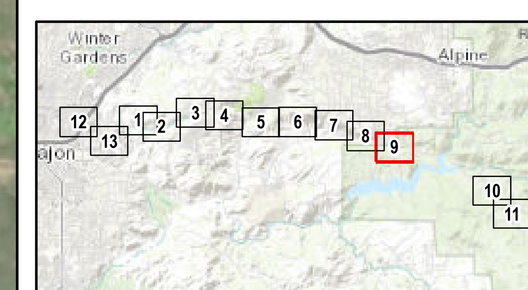
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 9 of 13

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building
Parcel Lines



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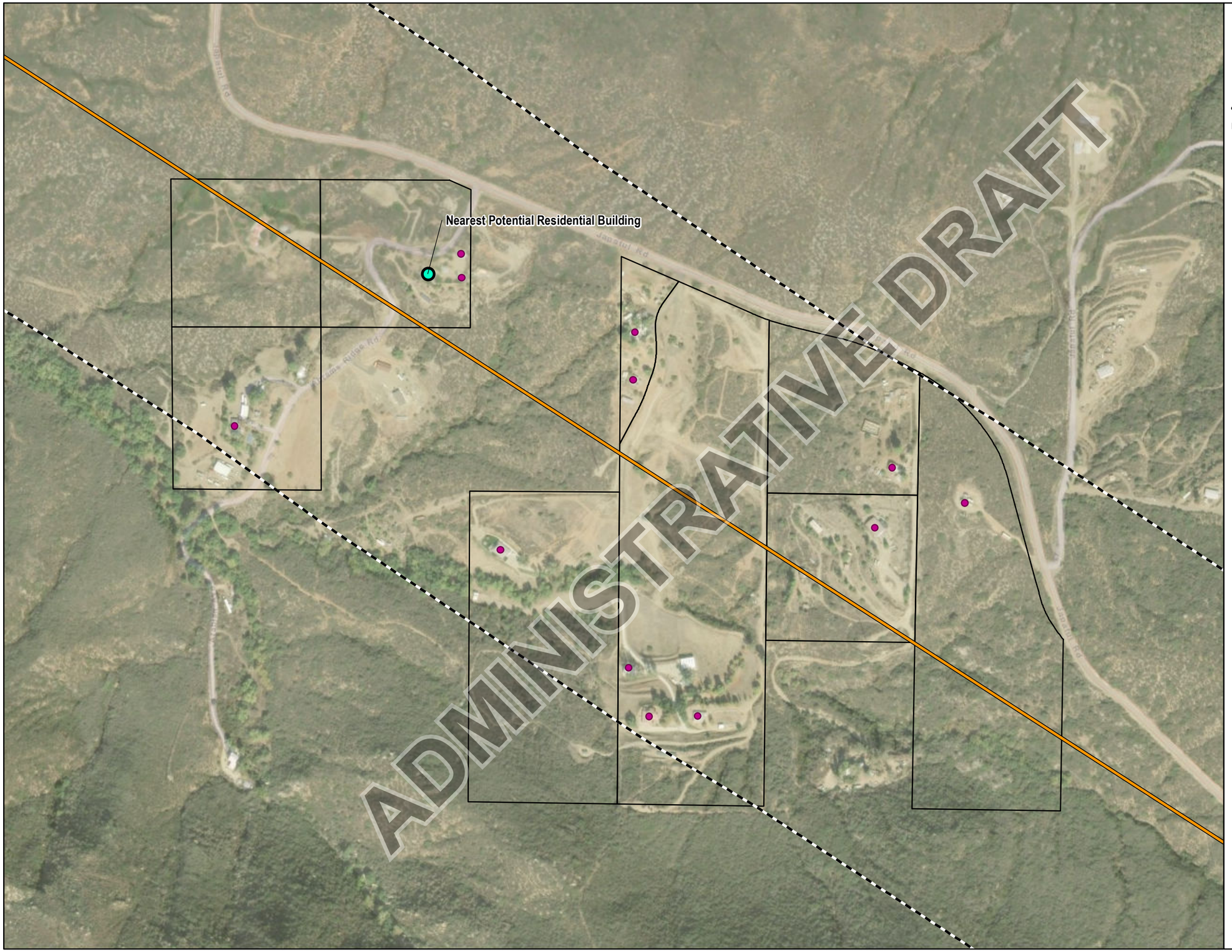


Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 10 of 13

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment

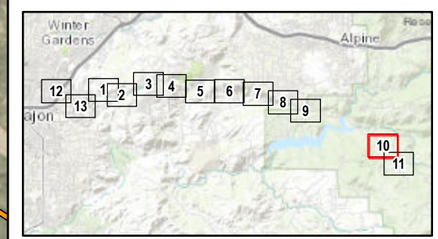
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building

Potential Residential Building Nearest Proposed OH Segment

Parcel Lines



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ADMINISTRATIVE DRAFT

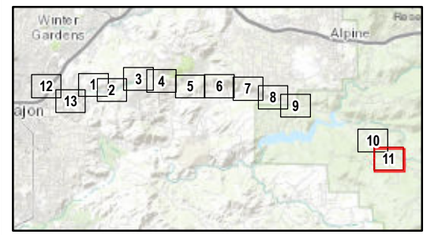
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 11 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard
- 1000 Foot Buffer

Sensitive Receptor

- Potential Residential Building
- Parcel Lines



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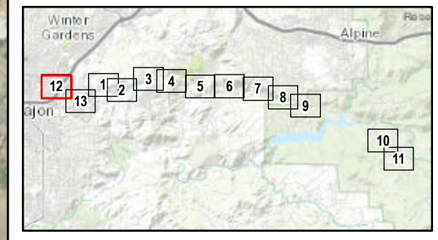
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 12 of 13

Suncrest
230 Kilovolt Loop-In Project

Staging Yard
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building
Parcel Lines



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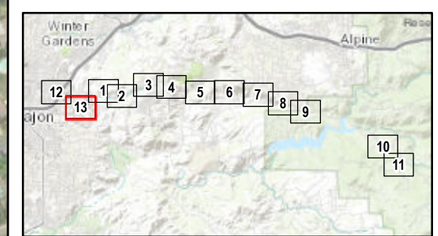
Attachment 3.4-A:
Sensitive Receptors within
1,000 Feet of the Proposed Project
Map 13 of 13

Suncrest
230 Kilovolt Loop-In Project

Staging Yard
1000 Foot Buffer

Sensitive Receptor

Potential Residential Building
Parcel Lines



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ATTACHMENT 3.4-B: AIR QUALITY AND GHG CALCULATIONS

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ATTACHMENT 3.4-B: AIR QUALITY AND GHG CALCULATIONS

1.0 INTRODUCTION

The following analyses were performed to evaluate the potential for impacts to air quality and greenhouse gas (GHG) emissions from the construction and operations and maintenance (O&M) of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt Loop-In Project (Proposed Project). Daily and annual emissions for the following criteria air pollutants (CAPs) and greenhouse gases (GHGs) from the construction and O&M phases of the Proposed Project were calculated:

- Volatile organic compounds (VOCs),
- Carbon monoxide (CO),
- Nitrogen oxides (NO_x),
- Sulfur oxides (SO_x),
- Particulate matter (PM) less than 10 microns in diameter (PM_{10}),
- PM less than 2.5 microns in diameter ($PM_{2.5}$),
- Carbon dioxide (CO_2),
- Methane, and
- Sulfur hexafluoride (SF_6).

This attachment contains 48 detailed tables presenting the inputs and resulting calculations used to identify these emissions. These emission estimates are derived from a combination of Proposed Project-specific operational parameters, construction activity assumptions, and standardized emission factors from regulatory agencies (e.g., California Air Resources Board [CARB], Office of Environmental Health Hazard Assessment, and the United States [U.S.] Environmental Protection Agency [EPA]). The tables typically include information such as equipment horsepower, load factors, hours of operation, fuel usage, vehicle miles traveled (VMT), trip generation rates, and pollutant-specific emission factors.

The tables also distinguish between short-term construction emissions and annual O&M emissions, reflecting the different sources and durations of each activity type. Construction-related tables typically summarize emissions from off-road equipment, on-road trucks, worker commute trips, and material handling. Operational tables summarize emissions from ongoing O&M activities, mobile sources, energy use, and area sources. Where applicable, the tables also incorporate regulatory reductions, fleet turnover assumptions, and compliance with adopted emission standards.

The emission sources considered and the calculation methodology for each of these sources are described in the sections that follow.

1.1 EMISSION CALCULATION METHODS

Construction of the Project is anticipated to begin in August 2027 and would take approximately 5 years to complete. Table 2-9: Proposed Construction Schedule in Chapter 2 – Project Description provides the complete construction schedule outlined by construction activity. Table

14 of Calculation Results establishes an index for each construction activity. Emissions were calculated for the following sources for the construction phase of the Proposed Project:

- Exhaust emissions from off-road equipment use,
- Exhaust emissions from on-road vehicle travel,
- Entrained road dust emissions from on-road vehicle travel,
- Fugitive dust emissions from earthwork activities, and
- Exhaust and dust emissions from helicopter use.

Emissions were calculated for the following sources for the O&M phase of the Proposed Project:

- Exhaust emissions from on-road vehicle travel,
- Entrained road dust emissions from on-road vehicle travel,
- Annual electricity consumption at SDG&E's existing Suncrest Substation, and
- Increases in fugitive SF_6 losses at SDG&E's existing Suncrest Substation.

Emissions calculation methods for each of the aforementioned sources are described in the subsections that follow. Additional conversion factors (e.g., grams to pounds) were added, as appropriate, to ensure proper units were used. These conversion factors may not be represented in the equations that follow. The results of these calculations have been included at the end of this attachment.

1.1.0 Off-Road Equipment Exhaust

Exhaust emissions from off-road equipment use were calculated using the following equation:

$$E_{i,j} = EF_{i,j} \times LF_j \times H_j \times N_j$$

Where:

$E_{i,j}$ = Emissions of pollutant i from equipment type j (pounds/day)

$EF_{i,j}$ = Emission factor for pollutant i from equipment type j (pounds/operating hour)

LF_j = Load factor for equipment type j

H_j = Daily operating time for equipment type j (hours/day)

N_j = Number of pieces of equipment of type j

The emission factors used for the off-road equipment uncontrolled emissions calculations were obtained from Table G-11 of Appendix G: Default Data Tables of the California Emissions Estimator Model (CalEEMod) version 2022.1 User Guide (CalEEMod Guide). The lookup tables provided in the CalEEMod Guide were used to identify emission factors for each piece of equipment that would be used for the Proposed Project. Load factors were obtained from Table G-12 from Appendix G of the CalEEMod Guide.

1.1.1 On-Road Vehicle Exhaust

Exhaust emissions from on-road vehicle use were calculated using the following equation:

$$E_{i,j} = EFmile_{i,j} \times VMT_j \times N_j + EFtrip_{i,j} \times Daily\ Trips_j \times N_j$$

Where:

$E_{i,j}$ = Emissions of pollutant *i* from motor vehicle type *j* (pounds/day)

$EFmile_{i,j}$ = Per mile emission factor for pollutant *i* from motor vehicle type *j* (pounds/mile)

VMT_j = Daily VMT for motor vehicle type *j* (miles/day)

$EFtrip_{i,j}$ = Per trip emission factor for pollutant *i* from motor vehicle type *j* (pounds/day)

$Daily\ Trips_j$ = Number of daily trips for motor vehicle type *j*

N_j = Number of motor vehicles of type *j*

The emission factors were obtained from the CARB's EMFAC Model.

1.1.2 On-Road Vehicle Entrained Dust

Entrained road dust emissions for paved and unpaved roads were calculated using the following equation:

$$E_{i,j} = EF_{i,j} \times VMT_j \times N_j$$

Where:

$E_{i,j}$ = Emissions of pollutant *i* from motor vehicle type *j* (pounds/day)

$EF_{i,j}$ = Emission factor for pollutant *i* from motor vehicle type *j* (pounds/mile)

VMT_j = Daily VMT for motor vehicle type *j* (miles/day)

N_j = Number of motor vehicles of type *j*

The emission factors used for this calculation were calculated using the methods identified in Section 5.1.4 Road Dust Screen from the CalEEMod Guide. Paved emission factors were determined using the following equation:

$$EFpaved_i = [k_i \times (sL)^{0.91} \times (W)^{1.02}] \times \left(1 - \frac{P}{4N}\right)$$

Where:

$EFpaved_i$ = paved road dust emission factor for pollutant *i* (grams/mile)

k_i = particle size multiplier for pollutant *i* (grams/VMT) (the U.S. EPA's AP-42 default values are 0.2 for $PM_{2.5}$ and 1.0 for PM_{10})

sL = road surface silt loading (grams/meter^2) (the U.S. EPA's AP-42 default value is 0.1)

W = average weight (short tons) of all vehicles traveling on the road (the statewide default is 2.4)

P = number of "wet" days with at least 0.01 inch of precipitation

N = number of days in the averaging period

Unpaved emission factors were determined using the following equation:

$$EFunpaved_i = \left(\frac{k_i (s/12)^1 (S/30)^{0.5}}{(M/0.5)^{0.2}} - C \right) \times \left(1 - \frac{P}{365}\right)$$

Where:

$EFunpaved_i$ = unpaved road dust emission factor for pollutant *i* (grams/mile)

k_i = particle size multiplier for pollutant *i* (grams/VMT) (the U.S. EPA's AP-42 default values are 81.65 for $PM_{2.5}$ and 816.47 for PM_{10})

s = surface material silt content (percent) (the U.S. EPA's AP-42 default value is 8.5)

M = surface material moisture content (percent) (the CalEEMod default value is 0.5)

S = mean vehicle speed (miles/hour) (the CalEEMod default value is 40)

C = emission factor for vehicle fleet exhaust, brakewear, and tirewear

P = number of "wet" days with at least 0.01 inch of precipitation

Fugitive dust control measures would be implemented during Proposed Project construction activities that have the potential to create fugitive dust or in inactive construction areas that have exposed soils. This could include but not be limited to watering or treating disturbed areas with a dust suppressant, requiring all haul trucks to maintain a minimum of at least 2 feet of freeboard or cover all loads; and requiring vehicles and equipment to maintain a speed limit of 15 mph on Proposed Project-specific construction routes and within temporary work areas. Measures C-10-C and C-11 from CalEEMod were applied, resulting in 55-percent and 44-percent reductions in dust emissions, respectively.

1.1.3 Earthwork Fugitive Dust

The following equations were used to calculate emissions from grading:

$$E_i = EF_i \times A$$

$$EF_{PM10} = 0.051 \times S^2 \times F \times \frac{1}{Wb}$$

$$EF_{PM2.5} = 0.04 \times S^{2.5} \times F \times \frac{1}{Wb}$$

Where:

E_i = emissions for pollutant *i* (pounds)

EF_i = emission factor for pollutant *i* (pounds/acre)

A = area graded (acres)

S = mean vehicle speed (miles/hour) (the U.S. EPA's AP-42 default value is 7.1)

F = scaling factor (the U.S. EPA's AP-42 default value is 0.031 for $PM_{2.5}$ and 0.6 for PM_{10})

Wb = blade width of the grading equipment (feet) (the CalEEMod default is 12)

The daily graded area was determined by comparing the average daily use, by grading equipment, against standard grading efficiency values contained in Table G-14 from Appendix G of the CalEEMod Guide. As discussed previously, fugitive dust control measures, consistent with SDAPCD Rule 55, would be implemented during Proposed Project construction activities that have the potential to create fugitive dust or in inactive construction areas that have exposed soils. This could include but not be limited to watering or treating disturbed areas with a dust suppressant, requiring all haul trucks to maintain a minimum of at least 2 feet of freeboard or cover all loads; and requiring vehicles and equipment to maintain a speed limit of 15 mph on Proposed Project-specific construction routes and within temporary work areas. Consistent with the CalEEMod Guide Section 4.4.4 Emissions Control, a 61-percent reduction in fugitive dust emissions would result from water two times daily.

The following equations were used to calculate emissions from bulldozing:

$$E_{PM_{2.5}} = \left(\frac{C_{TSP} \times s^{1.2}}{M^{1.3}}\right) \times F_{PM_{2.5}} \times Hr$$

$$E_{PM_{10}} = \left(\frac{C_{PM_{15}} \times s^{1.5}}{M^{1.4}}\right) \times F_{PM_{10}} \times Hr$$

Where:

$E_{PM2.5}$ = emissions of $PM_{2.5}$ (pounds)

C_{TSP}, *s*, C_{PM15}, *M*, $F_{PM2.5}$, F_{PM10} = constants provided by AP-42

Hr = hours of bulldozer operation (hours/day)

The bulldozing equations and constants were obtained from Appendix C of the CalEEMod Guide.

1.1.4 Helicopter Emissions

Helicopter emissions were calculated using emission factors and methods from Guidance on the Determination of Helicopter Emissions, Edition 2, which was prepared by Switzerland's Federal Office of Civil Aviation. Dust emissions associated with helicopter use were conservatively included in the exhaust emissions calculations.

1.1.5 Electricity Consumption

SDG&E's existing Suncrest Substation would consume electricity during daily operation. The following equation was used to calculate the annual GHG emissions due to electricity consumption:

$$E_i = C \times EF_i$$

Where:

E_i = emissions for pollutant i (metric tons)

C = annual electricity consumed (kilowatt-hours/year)

EF_i = emission factor for pollutant i (pounds/megawatt-hour)

Emission factors were obtained from Table G-3 from the CalEEMod Guide.

1.1.6 Fugitive SF_6 Emissions

The new circuit breakers and gas-insulated switchgear control buildings that would be installed at SDG&E's existing Suncrest Substation would utilize SF_6 as an insulating medium. The following equation was used to calculate the annual emissions due to the leaking of SF_6 gas during operation:

$$E_i = \frac{L}{100} \times M_i$$

Where:

E_i = SF_6 emissions (pounds of SF_6/year)

L = SF_6 leak rate (percent/year)

M_i = mass of SF_6 in equipment i (pounds)

1.2 EMISSIONS INPUTS

As previously discussed in Section 1.1 Emission Calculation Methods, Proposed Project construction was split up into eight separate construction activities. Due to the varying nature of

the anticipated equipment requirements throughout the construction process for each main Proposed Project component, the construction process was further separated into 23 unique phases of construction. More specifically, the Suncrest Substation Modifications, 230 kV UG Segment, and 230 kV OH Segment were split into three, four, and 10 construction phases, respectively, in the detailed calculations. The Site and ROW Restoration phase was also split by the proposed 230 kV UG and OH segments in the detailed calculations. Unless otherwise specified, off-road equipment, on-road vehicles, and helicopters were assumed to operate for the entire duration of the phase. Work was assumed to occur every day of the week except Sundays and federal holidays.

1.2.0 Off-Road Equipment and Helicopters

Off-road equipment assumptions are documented in Table 15 of Calculation Results and were provided by SDG&E.

1.2.1 On-Road Vehicles

On-road vehicle requirements were taken from proposed construction equipment and workforce estimates as documented in Table 15 of Calculation Results and were provided by SDG&E. Required worker commutes for each phase were calculated by subtracting the estimated workforce from the number of 1-ton pickup trucks, 0.5-ton pickup trucks, and welding trucks; these classes of on-road vehicles were assumed to return home with workers each day.

On-road vehicle distances were assumed to be 20 miles for each one-way vehicle trip (the approximate distance from the City of El Cajon to the easternmost section of the Proposed Project). The paved and unpaved road distances for each trip type were estimated using aerial imagery as documented in Table 16 of Calculation Results. Unless specified, each vehicle was assumed to make one round trip each day.

1.2.2 Earthwork

Fugitive dust emissions were calculated during all off-road equipment use for motor graders and scrapers.

1.2.3 Electricity Consumption

Estimated values for annual electricity consumption at SDG&E's existing Suncrest Substation were supplied by SDG&E.

1.2.4 Fugitive SF_6

The volume of SF_6 contained in the new circuit breakers being installed at SDG&E's existing Suncrest Substation were supplied by SDG&E. A conservative leak rate of 1 percent was utilized for the calculation of all emissions.

1.3 EMISSIONS SCENARIOS

1.3.0 Criteria Air Pollutants

The Proposed Project is located within the jurisdiction of the San Diego Air Pollution Control District (SDAPCD). Although the SDAPCD does not provide quantitative thresholds for

determining the significance of construction or mobile source-related impacts, the County of San Diego (County) references the Air Quality Impact Analysis (AQIA) trigger levels for new or modified stationary sources from SDAPCD's Regulation II, Rule 20.2. Although the AQIA trigger levels do not generally apply to mobile sources or general land development projects, these levels may be used for comparative purposes to evaluate the increased emissions that would be discharged to the San Diego Air Basin from proposed land development projects (County of San Diego 2007). Table 3.4-B-1: County Screening-Level Thresholds for Air Quality Impact Analysis details the County's thresholds for CAPs.

Table 3.4-B-1: County Screening-Level Thresholds for Air Quality Impact Analysis

Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
PM_{10}	Not applicable (NA)	100	15
$PM_{2.5}$	NA	55	10
CO	100	550	100
NO_x	25	250	40
SO_x	25	250	40
VOCs[1]	NA	75	13.7[2]

Source: SDAPCD Regulation II, Rule 20.2

[1] SDAPCD Rules 20.2 and 20.3 do not have AQIA thresholds for VOCs. The screening level for VOCs was used as specified by the Sout Coast Air Quality Management District.

[2] The 13.7 tons per year threshold was based on 75 pounds per day multiplied by 365 days per year and divided by 2,000 pounds per ton.

1.3.1 Greenhouse Gas Emissions

SDAPCD has not established quantitative California Environmental Quality Act GHG thresholds of significance for construction or mobile source-related emissions. However, the County's 2015 Greenhouse Gas Guidance includes a suggested "bright line" screening-level threshold for projects of 900 metric tons of CO_2 equivalent based on the California Air Pollution Control Officers Association's identified screening threshold. The guidance document indicates that construction emissions may be amortized over an assumed 20-year project lifespan. Project emissions below this bright-line threshold are assumed to be less than significant for GHG emissions.

CALCULATION RESULTS

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Table 1: Off-Road Equipment Load Factors

OFFROAD Equipment Type	Load Factor
Aerial Lifts	0.31
Air Compressors	0.48
Bore/Drill Rigs	0.5
Cement and Mortar Mixers	0.56
Concrete/Industrial Saws	0.73
Cranes	0.29
Crawler Tractors	0.43
Crushing/Proc. Equipment	0.78
Dumpers/Tenders	0.38
Excavators	0.38
Forklifts	0.2
Generator Sets	0.74
Graders	0.41
Off-Highway Tractors	0.44
Off-Highway Trucks	0.38
Other Construction Equipment	0.42
Other General Industrial Equipment	0.34
Other Material Handling Equipment	0.4
Pavers	0.42
Paving Equipment	0.36
Plate Compactors	0.43
Pressure Washers	0.3
Pumps	0.74
Rollers	0.38
Rough Terrain Forklifts	0.4
Rubber Tired Dozers	0.4
Rubber Tired Loaders	0.36
Scrapers	0.48
Signal Boards	0.82
Skid Steer Loaders	0.37
Surfacing Equipment	0.3
Sweepers/Scrubbers	0.46
Tractors/Loaders/Backhoes	0.37
Trenchers	0.5
Welders	0.45

Table 2: EMFAC Emissions Inventory - Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Energy Consumption	Fuel Consumption	Efficiency
San Diego County APCD	2027	HHDT	Aggregate	Aggregate	Gasoline	5.043750208	154199.0969	154199.1	0	32999.32	0	38.25465059	4.030858851
San Diego County APCD	2027	HHDT	Aggregate	Aggregate	Diesel	15666.85429	598243597.7	5.98E+08	0	73607682	0	97100.98408	6.161045672
San Diego County APCD	2027	LDA	Aggregate	Aggregate	Gasoline	1146055.771	16074505170	1.61E+10	0	1.85E+09	0	535651.0521	30.00928516
San Diego County APCD	2027	LDA	Aggregate	Aggregate	Diesel	4117.071769	42332484.91	42332485	0	6008090	0	1035.042217	40.89928336
San Diego County APCD	2027	LDT1	Aggregate	Aggregate	Gasoline	116912.8927	1405746321	1.41E+09	0	1.76E+08	0	57841.95691	24.30322894
San Diego County APCD	2027	LDT1	Aggregate	Aggregate	Diesel	23.9953913	119639.4598	119639.5	0	23104.54	0	5.114511519	23.39215767
San Diego County APCD	2027	LDT2	Aggregate	Aggregate	Gasoline	559246.7967	7919437137	7.92E+09	0	9.03E+08	0	326237.8691	24.27503943
San Diego County APCD	2027	LDT2	Aggregate	Aggregate	Diesel	2153.007006	31139545.91	31139546	0	3521135	0	984.0168911	31.64533677
San Diego County APCD	2027	MHDT	Aggregate	Aggregate	Gasoline	3313.679473	64008516.47	64008516	0	21680132	0	13038.57169	4.909166281
San Diego County APCD	2027	MHDT	Aggregate	Aggregate	Diesel	18264.2497	235774861.2	2.36E+08	0	66249838	0	27452.39976	8.588497297
San Diego County APCD	2028	HHDT	Aggregate	Aggregate	Gasoline	4.501556304	156023.8994	156023.9	0	29451.95	0	37.76600495	4.131331858
San Diego County APCD	2028	HHDT	Aggregate	Aggregate	Diesel	15874.50981	602495157.8	6.02E+08	0	74706373	0	95980.02496	6.277297365
San Diego County APCD	2028	LDA	Aggregate	Aggregate	Gasoline	1138655.227	16053287638	1.61E+10	0	1.83E+09	0	524669.2613	30.59696617
San Diego County APCD	2028	LDA	Aggregate	Aggregate	Diesel	3597.182431	37279498.77	37279499	0	5276439	0	901.1102965	41.37062789
San Diego County APCD	2028	LDT1	Aggregate	Aggregate	Gasoline	113388.8155	1368348304	1.37E+09	0	1.7E+08	0	55386.83136	24.70530035
San Diego County APCD	2028	LDT1	Aggregate	Aggregate	Diesel	13.93693392	71540.08293	71540.08	0	13492.04	0	2.945116505	24.29108757
San Diego County APCD	2028	LDT2	Aggregate	Aggregate	Gasoline	560389.5503	7960773730	7.96E+09	0	9.04E+08	0	321342.9824	24.7734482
San Diego County APCD	2028	LDT2	Aggregate	Aggregate	Diesel	2162.541275	31218384.68	31218385	0	3526888	0	969.4044749	32.20367297
San Diego County APCD	2028	MHDT	Aggregate	Aggregate	Gasoline	3256.178819	63355253.32	63355253	0	21303928	0	12775.16531	4.959251156
San Diego County APCD	2028	MHDT	Aggregate	Aggregate	Diesel	18382.0313	234588896.7	2.35E+08	0	66733442	0	27162.20521	8.636592463
San Diego County APCD	2029	HHDT	Aggregate	Aggregate	Gasoline	4.148868333	158288.9772	158289	0	27144.45	0	37.46642774	4.224821708
San Diego County APCD	2029	HHDT	Aggregate	Aggregate	Diesel	16018.91072	605638516.2	6.06E+08	0	75548637	0	94701.91615	6.395208681
San Diego County APCD	2029	LDA	Aggregate	Aggregate	Gasoline	1131921.21	16036302442	1.6E+10	0	1.82E+09	0	514731.4881	31.15469485
San Diego County APCD	2029	LDA	Aggregate	Aggregate	Diesel	3138.761023	32705225.78	32705226	0	4622944	0	781.5409802	41.84710285
San Diego County APCD	2029	LDT1	Aggregate	Aggregate	Gasoline	110049.4691	1333503283	1.33E+09	0	1.65E+08	0	53108.01478	25.10926625
San Diego County APCD	2029	LDT1	Aggregate	Aggregate	Diesel	9.071905132	48034.62749	48034.63	0	8817.357	0	1.964969441	24.44548321
San Diego County APCD	2029	LDT2	Aggregate	Aggregate	Gasoline	561447.6069	7995244695	8E+09	0	9.05E+08	0	316736.0332	25.24261169
San Diego County APCD	2029	LDT2	Aggregate	Aggregate	Diesel	2168.08014	31251936.35	31251936	0	3526954	0	954.3392018	32.74719962
San Diego County APCD	2029	MHDT	Aggregate	Aggregate	Gasoline	3190.933514	62266677.17	62266677	0	20877053	0	12438.39957	5.006003932
San Diego County APCD	2029	MHDT	Aggregate	Aggregate	Diesel	18391.52691	231980947.4	2.32E+08	0	66809531	0	26712.54901	8.684343349
San Diego County APCD	2030	HHDT	Aggregate	Aggregate	Gasoline	3.812080728	159519.2615	159519.3	0	24940.98	0	37.07818304	4.302240521
San Diego County APCD	2030	HHDT	Aggregate	Aggregate	Diesel	16110.17793	607884614	6.08E+08	0	76169863	0	93373.86612	6.510222177
San Diego County APCD	2030	LDA	Aggregate	Aggregate	Gasoline	1125996.514	16023999209	1.6E+10	0	1.81E+09	0	505862.3499	31.67659979
San Diego County APCD	2030	LDA	Aggregate	Aggregate	Diesel	2728.528241	28641310.06	28641310	0	4037981	0	675.7769225	42.38278803
San Diego County APCD	2030	LDT1	Aggregate	Aggregate	Gasoline	106804.2222	1300598948	1.3E+09	0	1.6E+08	0	50973.39719	25.51524953
San Diego County APCD	2030	LDT1	Aggregate	Aggregate	Diesel	3.300868232	21087.76479	21087.76	0	3435.947	0	0.842206694	25.0387048
San Diego County APCD	2030	LDT2	Aggregate	Aggregate	Gasoline	562454.2273	8024115658	8.02E+09	0	9.06E+08	0	312420.0126	25.68374411
San Diego County APCD	2030	LDT2	Aggregate	Aggregate	Diesel	2167.690441	31229258.97	31229259	0	3519338	0	938.3299397	33.28174627
San Diego County APCD	2030	MHDT	Aggregate	Aggregate	Gasoline	3116.810947	60749980.87	60749981	0	20392097	0	12031.59571	5.049203975
San Diego County APCD	2030	MHDT	Aggregate	Aggregate	Diesel	18291.87857	227982638.8	2.28E+08	0	66477395	0	26105.94242	8.732978685

Table 3: On-Road Fuel Efficiency (miles/gallon)

Vehicle Category	Year	Fuel	Efficiency	Lookup
passenger	2026	Gasoline	25.72	passenger_Gasoline
vendor	2026	Gasoline	4.91	vendor_Gasoline
hhdt	2026	Gasoline	4.03	hhdt_Gasoline
passenger	2026	Diesel	29.83	passenger_Diesel
vendor	2026	Diesel	8.59	vendor_Diesel
hhdt	2026	Diesel	6.16	hhdt_Diesel

Table 4: EMFAC On-Road Emissions

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX
San Diego County APCD	2027	HHDT	Aggregate	Aggregate	Gasoline	5.043750208	154199.0969	154199.1	0	32999.32	0.869324963	0	0.002206849	0.000299105
San Diego County APCD	2027	HHDT	Aggregate	Aggregate	Diesel	15666.85429	598243597.7	5.98E+08	0	73607682	1157.912731	339.913989	239.1124123	17.05054866
San Diego County APCD	2027	LDA	Aggregate	Aggregate	Gasoline	1146055.771	16074505170	1.61E+10	0	1.85E+09	562.8572126	0	449.9393773	24.36519125
San Diego County APCD	2027	LDA	Aggregate	Aggregate	Diesel	4117.071769	42332484.91	42332485	0	6008090	6.073782003	0	0	0.545793366
San Diego County APCD	2027	LDT1	Aggregate	Aggregate	Gasoline	116912.8927	1405746321	1.41E+09	0	1.76E+08	201.6530712	0	74.20168859	3.273179563
San Diego County APCD	2027	LDT1	Aggregate	Aggregate	Diesel	23.9953913	119639.4598	119639.5	0	23104.54	0.172389613	0	0	0.031177051
San Diego County APCD	2027	LDT2	Aggregate	Aggregate	Gasoline	559246.7967	7919437137	7.92E+09	0	9.03E+08	481.4224986	0	282.5139894	12.50275665
San Diego County APCD	2027	LDT2	Aggregate	Aggregate	Diesel	2153.007006	31139545.91	31139546	0	3521135	1.469060388	0	0	0.161792639
San Diego County APCD	2027	MHDT	Aggregate	Aggregate	Gasoline	3313.679473	64008516.47	64008516	0	21680132	21.21617317	0.098903509	9.384051589	0.091529179
San Diego County APCD	2027	MHDT	Aggregate	Aggregate	Diesel	18264.2497	235774861.2	2.36E+08	0	66249838	251.7736604	74.44447248	119.1906189	2.29984996
San Diego County APCD	2028	HHDT	Aggregate	Aggregate	Gasoline	4.501556304	156023.8994	156023.9	0	29451.95	0.755798367	0	0.001629408	0.000286446
San Diego County APCD	2028	HHDT	Aggregate	Aggregate	Diesel	15874.50981	602495157.8	6.02E+08	0	74706373	1127.726431	337.5054235	241.1528206	17.08768486
San Diego County APCD	2028	LDA	Aggregate	Aggregate	Gasoline	1138655.227	16053287638	1.61E+10	0	1.83E+09	528.7945508	0	432.1180082	22.93036782
San Diego County APCD	2028	LDA	Aggregate	Aggregate	Diesel	3597.182431	37279498.77	37279499	0	5276439	4.69907788	0	0	0.407935223
San Diego County APCD	2028	LDT1	Aggregate	Aggregate	Gasoline	113388.8155	1368348304	1.37E+09	0	1.7E+08	179.6155956	0	68.54316453	3.000215097
San Diego County APCD	2028	LDT1	Aggregate	Aggregate	Diesel	13.93693392	71540.08293	71540.08	0	13492.04	0.092779023	0	0	0.016686223
San Diego County APCD	2028	LDT2	Aggregate	Aggregate	Gasoline	560389.5503	7960773730	7.96E+09	0	9.04E+08	448.4889672	0	271.52824	11.89841176
San Diego County APCD	2028	LDT2	Aggregate	Aggregate	Diesel	2162.541275	31218384.68	31218385	0	3526888	1.41197045	0	0	0.15802892
San Diego County APCD	2028	MHDT	Aggregate	Aggregate	Gasoline	3256.178819	63355253.32	63355253	0	21303928	18.04814068	0.094453111	8.822905646	0.090864353
San Diego County APCD	2028	MHDT	Aggregate	Aggregate	Diesel	18382.0313	234588896.7	2.35E+08	0	66733442	229.4533448	71.26858298	117.9433717	2.025892664
San Diego County APCD	2029	HHDT	Aggregate	Aggregate	Gasoline	4.148868333	158288.9772	158289	0	27144.45	0.672725317	0	0.001471315	0.000272218
San Diego County APCD	2029	HHDT	Aggregate	Aggregate	Diesel	16018.91072	605638516.2	6.06E+08	0	75548637	1096.501332	334.8506885	241.7389884	17.09680185
San Diego County APCD	2029	LDA	Aggregate	Aggregate	Gasoline	1131921.21	16036302442	1.6E+10	0	1.82E+09	500.2492414	0	416.4383814	21.51207478
San Diego County APCD	2029	LDA	Aggregate	Aggregate	Diesel	3138.761023	32705225.78	32705226	0	4622944	3.670441014	0	0	0.309514488
San Diego County APCD	2029	LDT1	Aggregate	Aggregate	Gasoline	110049.4691	1333503283	1.33E+09	0	1.65E+08	159.1460288	0	63.34716317	2.742943218
San Diego County APCD	2029	LDT1	Aggregate	Aggregate	Diesel	9.071905132	48034.62749	48034.63	0	8817.357	0.05843237	0	0	0.010497931
San Diego County APCD	2029	LDT2	Aggregate	Aggregate	Gasoline	561447.6069	7995244695	8E+09	0	9.05E+08	419.6790594	0	262.2200839	11.28981116
San Diego County APCD	2029	LDT2	Aggregate	Aggregate	Diesel	2168.08014	31251936.35	31251936	0	3526954	1.375519319	0	0	0.156472218
San Diego County APCD	2029	MHDT	Aggregate	Aggregate	Gasoline	3190.933514	62266677.17	62266677	0	20877053	15.2884824	0.090144907	8.32640739	0.089653077
San Diego County APCD	2029	MHDT	Aggregate	Aggregate	Diesel	18391.52691	231980947.4	2.32E+08	0	66809531	208.7973732	68.09263731	115.5465945	1.790961174
San Diego County APCD	2030	HHDT	Aggregate	Aggregate	Gasoline	3.812080728	159519.2615	159519.3	0	24940.98	0.569114852	0	0.001460587	0.000259171
San Diego County APCD	2030	HHDT	Aggregate	Aggregate	Diesel	16110.17793	607884614	6.08E+08	0	76169863	1069.256683	332.6056276	241.9921535	17.09159341
San Diego County APCD	2030	LDA	Aggregate	Aggregate	Gasoline	1125996.514	16023999209	1.6E+10	0	1.81E+09	476.5708493	0	402.4235666	20.15430157
San Diego County APCD	2030	LDA	Aggregate	Aggregate	Diesel	2728.528241	28641310.06	28641310	0	4037981	2.854246927	0	0	0.230081116
San Diego County APCD	2030	LDT1	Aggregate	Aggregate	Gasoline	106804.2222	1300598948	1.3E+09	0	1.6E+08	139.1479137	0	58.33585468	2.49221352
San Diego County APCD	2030	LDT1	Aggregate	Aggregate	Diesel	3.300868232	21087.76479	21087.76	0	3435.947	0.019240387	0	0	0.003436288
San Diego County APCD	2030	LDT2	Aggregate	Aggregate	Gasoline	562454.2273	8024115658	8.02E+09	0	9.06E+08	395.0133233	0	254.3204635	10.70359658
San Diego County APCD	2030	LDT2	Aggregate	Aggregate	Diesel	2167.690441	31229258.97	31229259	0	3519338	1.344421265	0	0	0.154818688
San Diego County APCD	2030	MHDT	Aggregate	Aggregate	Gasoline	3116.810947	60749980.87	60749981	0	20392097	13.08593048	0.086032915	7.876635966	0.087873162
San Diego County APCD	2030	MHDT	Aggregate	Aggregate	Diesel	18291.87857	227982638.8	2.28E+08	0	66477395	190.010079	64.98702634	112.73342	1.588142199

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Air District
Region: San Diego APCD
Calendar Year: 2027, 2028, 2029, 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX
0	3.25062E-05	0.000849877	0.005625922	0.000325304	0	3.53535E-05	0.003399508	0.016074063	360.7627444	0	2.0168087	0.022985081	0	7.08918E-06
0.162079559	0	5.824136601	18.31420476	17.82149881	0.169408077	0	23.29654641	52.32629932	1021452.458	65544.23622	0	0.466214969	1.36450918	0
0	3.63760166	35.43848456	45.98760028	26.49936859	0	3.956223703	141.7539382	131.3931436	4947018.333	0	132710.4397	39.81575376	0	119.6283391
0	0	0.093327857	0.124556344	0.57047172	0	0	0.373311426	0.355875268	11586.77719	0	0	0.069017594	0	0
0	0.504941073	3.099163475	5.07668002	3.559881422	0	0.549169488	12.3966539	14.50480006	532241.7632	0	16289.69513	12.0141339	0	19.68728787
0	0	0.000263762	0.000485041	0.032586739	0	0	0.001055047	0.001385831	57.25438485	0	0	0.001874476	0	0
0	1.785599363	17.45950172	27.31770905	13.59788862	0	1.942002227	69.83800688	78.05059728	3012889.616	0	80915.36059	26.74167992	0	70.0675048
0	0	0.068651464	0.107514933	0.169108185	0	0	0.274605857	0.307185523	11015.57433	0	0	0.041325108	0	0
0	0.011258855	0.211671935	1.112451009	0.099546333	0	0.012245032	0.846687741	3.178431454	121965.1718	629.3347392	1053.916266	0.701981787	0.317775712	1.049663111
0.097326144	0	0.779691889	4.135796497	2.403838969	0.1017268	0	3.118767555	11.81656142	293291.9341	14023.87802	0	0.245411116	0.062200872	0
0	2.72274E-05	0.000859935	0.005649615	0.000311536	0	2.96123E-05	0.003439738	0.016141758	356.3555807	0	1.790009055	0.020941169	0	6.33433E-06
0.15871853	0	5.867181127	18.54492012	17.86031415	0.165895078	0	23.46872451	52.98548605	1009180.817	65267.30284	0	0.456195137	1.382815224	0
0	3.452381221	35.39170755	45.91353477	24.93886719	0	3.754779576	141.5668302	131.1815279	4846432.695	0	129152.6833	37.14989719	0	113.0180876
0	0	0.082187845	0.109859722	0.426380243	0	0	0.328751381	0.313884919	10087.47669	0	0	0.057858696	0	0
0	0.465246476	3.016714339	4.938026886	3.263007661	0	0.505997992	12.06685736	14.10864825	509773.5314	0	15475.28465	10.75213183	0	18.07785378
0	0	0.00015772	0.00028745	0.0174407	0	0	0.00063088	0.000821286	32.96909846	0	0	0.001256359	0	0
0	1.711788356	17.55063399	27.47084395	12.94060841	0	1.861726023	70.20253598	78.48812558	2968100.578	0	79284.81776	25.34441343	0	67.05986677
0	0	0.068825275	0.107952438	0.165174286	0	0	0.275301101	0.308435538	10851.99568	0	0	0.041281316	0	0
0	0.010863487	0.209511637	1.101097469	0.098823274	0	0.011815033	0.838046548	3.145992769	119517.2077	613.2294539	1020.029255	0.605179044	0.314466247	1.007988754
0.081619892	0	0.775769983	4.114971081	2.117494541	0.085310381	0	3.103079932	11.75706023	290077.3086	13989.92143	0	0.2159498	0.060675156	0
0	2.07377E-05	0.000872419	0.005703241	0.000296062	0	2.25542E-05	0.003489675	0.016294974	353.710753	0	1.593862308	0.018763212	0	5.56518E-06
0.153957773	0	5.899846332	18.73893275	17.86984336	0.160919061	0	23.59938533	53.53980787	995288.8698	64851.465	0	0.4464908	1.3971875	0
0	3.263621582	35.35426132	45.85097685	23.39634411	0	3.549486246	141.4170453	131.002791	4755441.002	0	125901.6929	34.87073006	0	106.9695994
0	0	0.072103223	0.096475253	0.32350936	0	0	0.288412894	0.275643581	8748.958311	0	0	0.047025979	0	0
0	0.427765377	2.939893639	4.807259396	2.983201018	0	0.465233877	11.75957456	13.73502685	488920.1372	0	14718.0236	9.595344627	0	16.59550064
0	0	0.000105899	0.000190741	0.010972601	0	0	0.000423596	0.000544974	21.9968449	0	0	0.000793279	0	0
0	1.636046636	17.62663004	27.59889739	12.27869973	0	1.779349991	70.50652015	78.85399254	2925911.885	0	77784.52357	24.1017199	0	64.2854445
0	0	0.068899245	0.108163349	0.163547197	0	0	0.275596978	0.309038141	10683.34752	0	0	0.041221746	0	0
0	0.010503584	0.205911788	1.082178305	0.097505902	0	0.011423606	0.823647151	3.091938014	116375.5428	596.0717429	985.2081582	0.521759182	0.309901507	0.967372544
0.068551199	0	0.767145667	4.069211642	1.871940491	0.07165078	0	3.068582666	11.62631898	285153.9495	13879.60555	0	0.190769641	0.059172924	0
0	1.57636E-05	0.000879199	0.005727017	0.000281873	0	1.71444E-05	0.003516798	0.016362907	350.2053256	0	1.4174566	0.01769744	0	4.77687E-06
0.149312525	0	5.92413513	18.90705298	17.86439942	0.156063775	0	23.69654052	54.02015138	980920.2264	64353.25602	0	0.437214085	1.408506167	0
0	3.077478351	35.32713713	45.80223743	21.91964185	0	3.347038498	141.3085485	130.8635355	4674270.478	0	122963.6989	32.92712201	0	101.3725417
0	0	0.063143756	0.08451717	0.240484363	0	0	0.252575022	0.241477628	7564.982864	0	0	0.037865671	0	0
0	0.391189101	2.867351452	4.682466556	2.710509594	0	0.42545384	11.46940581	13.37847587	469393.9861	0	14000.99896	8.517769915	0	15.18891135
0	0	4.64909E-05	7.99755E-05	0.003591662	0	0	0.000185964	0.000228502	9.428080474	0	0	0.000264725	0	0
0	1.561744155	17.69028009	27.70584346	11.64113788	0	1.698539263	70.76112038	79.15955275	2886357.052	0	76409.32543	23.0459893	0	61.74762966
0	0	0.068849249	0.108112167	0.161818902	0	0	0.275396997	0.308891905	10504.13188	0	0	0.041092299	0	0
0	0.01015675	0.200896173	1.055818526	0.095570081	0	0.011046393	0.803584693	3.01662436	112571.6714	577.7189918	949.5974533	0.452510807	0.303968302	0.929205941
0.057774785	0	0.753923524	3.999064008	1.659950942	0.060387104	0	3.015694097	11.42589717	278549.5767	13693.32253	0	0.168993476	0.057651352	0

N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSOAK	TOG_RUNLOSS
0.028611641	0	6.53779E-05	0.121947504	0	3.84683E-05	0.00312769	0.027510222	0.011032576	0.177945511	0	4.21179E-05	0.00312769	0.027510222
160.9302507	10.32652111	0	10.03748043	29.37750846	0	0	0	0	11.4269074	33.44405712	0	0	0
72.32571802	0	61.72496757	142.1118883	0	530.5783438	168.354361	446.8555726	596.9659117	207.3693338	0	580.9165014	168.354361	446.8555726
1.825501465	0	0	1.485908168	0	0	0	0	0	1.691607659	0	0	0	0
15.00302387	0	7.443310695	53.21309356	0	101.6360462	36.47049042	104.6407297	137.1882711	77.6484212	0	111.2786774	36.47049042	104.6407297
0.009020452	0	0	0.040356362	0	0	0	0	0	0.045943035	0	0	0	0
46.46300881	0	34.23579179	100.6852234	0	314.76852	79.53899726	223.4777423	300.5765477	146.9196416	0	344.6319088	79.53899726	223.4777423
1.735508221	0	0	0.889705247	0	0	0	0	0	1.012870272	0	0	0	0
1.174553508	0.008713514	0.765918487	3.346278515	1.203032258	5.573879611	0.705097306	5.795242219	2.988328843	4.882881754	1.755461846	6.102696578	0.705097306	5.795242219
46.20826366	2.209467692	0	5.28363402	1.339167717	0	0	0	0	6.015015135	1.524540507	0	0	0
0.02619642	0	4.73318E-05	0.108320492	0	3.43619E-05	0.002406742	0.021148439	0.008577023	0.158061007	0	3.7622E-05	0.002406742	0.021148439
158.9968488	10.28289014	0	9.821756209	29.77163258	0	0	0	0	11.1813218	33.89273744	0	0	0
70.02881264	0	60.05385256	130.495149	0	497.3493716	160.7485653	436.7224405	582.6408503	190.4182151	0	544.5349594	160.7485653	436.7224405
1.58928606	0	0	1.245663659	0	0	0	0	0	1.418105258	0	0	0	0
13.66935456	0	7.036020894	47.33624237	0	92.55650189	34.41776251	100.2863483	132.580168	69.07293375	0	101.3377193	34.41776251	100.2863483
0.005194295	0	0	0.027048659	0	0	0	0	0	0.0307931	0	0	0	0
44.77546635	0	33.63604676	94.21012825	0	298.734522	76.58968286	218.2907481	293.7172273	137.471198	0	327.0766992	76.58968286	218.2907481
1.709736338	0	0	0.888762435	0	0	0	0	0	1.011796944	0	0	0	0
1.040598908	0.008442384	0.73457286	2.839216638	1.183862703	5.287819447	0.647975275	5.388637896	2.800469035	4.142978254	1.727489677	5.789496705	0.647975275	5.388637896
45.7017981	2.204117819	0	4.649339966	1.306319463	0	0	0	0	5.292919637	1.48714527	0	0	0
0.024560775	0	4.23532E-05	0.0921339	0	3.01829E-05	0.001896412	0.016629523	0.006806793	0.134441571	0	3.30465E-05	0.001896412	0.016629523
156.8081668	10.21737472	0	9.612824477	30.08106374	0	0	0	0	10.94346893	34.24500126	0	0	0
68.08857002	0	58.56558533	120.5948097	0	467.1704585	152.4519233	420.3892243	561.2108005	175.9716633	0	511.4928483	152.4519233	420.3892243
1.378401945	0	0	1.012441633	0	0	0	0	0	1.152597487	0	0	0	0
12.44083749	0	6.661768979	41.93585665	0	84.20488797	32.01157079	93.71107924	125.2946174	61.19270358	0	92.19375327	32.01157079	93.71107924
0.003465612	0	0	0.017078819	0	0	0	0	0	0.0194431	0	0	0	0
43.29089734	0	33.13963609	88.42234334	0	284.0398035	73.29163115	209.9248207	283.0429681	129.0256758	0	310.9878321	73.29163115	209.9248207
1.683165752	0	0	0.887479916	0	0	0	0	0	1.01033688	0	0	0	0
0.920573071	0.008154924	0.705457771	2.403103722	1.161563346	5.015670267	0.590395527	4.926524268	2.577809326	3.506603311	1.694950508	5.491527609	0.590395527	4.926524268
44.92612086	2.186737506	0	4.107218048	1.273976832	0	0	0	0	4.675755101	1.450325647	0	0	0
0.022733166	0	4.00515E-05	0.084912257	0	2.59053E-05	0.001460466	0.013259729	0.005668078	0.123903766	0	2.83631E-05	0.001460466	0.013259729
154.5443811	10.13888169	0	9.413099347	30.32475153	0	0	0	0	10.71609707	34.52242126	0	0	0
66.46109478	0	57.23558748	112.1636104	0	439.1829993	145.0281122	409.5327976	546.3989606	163.6688769	0	480.8501034	145.0281122	409.5327976
1.191866131	0	0	0.815225595	0	0	0	0	0	0.92808014	0	0	0	0
11.26653424	0	6.307205838	36.89090844	0	76.26205366	29.7769885	87.86178501	118.3046279	53.83112699	0	83.49734948	29.7769885	87.86178501
0.001485398	0	0	0.005699382	0	0	0	0	0	0.006488368	0	0	0	0
42.00324569	0	32.73051738	83.50381466	0	270.7147447	70.44387671	205.1294548	276.8791564	121.8485703	0	296.39857	70.44387671	205.1294548
1.654930255	0	0	0.884693011	0	0	0	0	0	1.007164174	0	0	0	0
0.824329087	0.007856614	0.676678663	2.045050851	1.135748847	4.769367767	0.538213995	4.517918487	2.379195453	2.984133401	1.657282052	5.221857374	0.538213995	4.517918487
43.88559925	2.15738854	0	3.638383197	1.241217796	0	0	0	0	4.142022311	1.413031977	0	0	0

TOG_DIURN	NH3_RUNEX	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
0.011032576	0.007647654	5.258599919	0	0.220845043	0.003566507	0	1.99382E-05
0	142.1873912	45.81247052	429.042522	0	9.672543957	0.620664722	0
596.9659117	663.0873986	11394.91454	0	5347.639056	48.90631268	0	1.311977806
0	0.144657047	24.48662386	0	0	0.109790602	0	0
137.1882711	57.6021371	2262.597533	0	968.7010764	5.261751693	0	0.161040221
0	0.000408828	0.270935596	0	0	0.000542514	0	0
300.5765477	331.3214899	6716.456207	0	3045.781845	29.78548121	0	0.799930718
0	0.106408938	9.267472738	0	0	0.104378165	0	0
2.988328843	3.175078117	67.10839915	17.2078111	118.6573926	1.205749893	0.006221615	0.010419035
0	55.33171984	22.61488225	47.1947206	0	2.777299231	0.132797739	0
0.008577023	0.007739409	5.159686811	0	0.211813663	0.003522938	0	1.76961E-05
0	143.4689173	44.15566856	435.399753	0	9.556338862	0.618042329	0
582.6408503	675.3985139	10939.72855	0	5075.078984	47.91192124	0	1.276805762
0	0.127390164	21.30528458	0	0	0.095583968	0	0
132.580168	56.57423398	2064.645709	0	885.5652502	5.039630347	0	0.152988944
0	0.000244464	0.178622769	0	0	0.000312399	0	0
293.7172273	338.2972228	6501.444827	0	2926.356664	29.34269597	0	0.783811142
0	0.106678343	9.299282548	0	0	0.102828174	0	0
2.800469035	3.142673655	55.85341296	16.9282228	111.8384799	1.181549276	0.006062397	0.010084028
0	55.30371862	20.85914954	47.5578864	0	2.746858649	0.13247619	0
0.006806793	0.007851766	4.773360082	0	0.179989803	0.003496791	0	1.5757E-05
0	144.49365	42.61026578	440.555288	0	9.424790425	0.614104593	0
561.2108005	686.4254512	10549.82386	0	4828.947609	47.01237572	0	1.244666412
0	0.111759123	18.2519979	0	0	0.082900826	0	0
125.2946174	55.63310557	1880.840513	0	808.4110673	4.833473315	0	0.145502647
0	0.000164142	0.113009193	0	0	0.000208431	0	0
283.0429681	344.4782998	6315.949932	0	2819.903675	28.92561779	0	0.768979206
0	0.106792994	9.31019129	0	0	0.101230147	0	0
2.577809326	3.088675929	46.36927078	16.6048798	105.2684547	1.15049072	0.005892776	0.009739786
0	54.89597717	19.28635575	47.6477004	0	2.700237382	0.131431565	0
0.005668078	0.007912793	4.804828933	0	0.156768299	0.003462136	0	1.4013E-05
0	145.2838178	41.22512147	444.701181	0	9.288727965	0.609386852	0
546.3989606	696.0886763	10220.23652	0	4607.303182	46.20992245	0	1.215621351
0	0.097872056	15.53290513	0	0	0.071682057	0	0
118.3046279	54.70445837	1708.336465	0	733.8806234	4.640437432	0	0.138414129
0	7.20604E-05	0.038110124	0	0	8.93359E-05	0	0
276.8791564	349.9032388	6163.670319	0	2727.564665	28.534578	0	0.755383973
0	0.106715502	9.291650538	0	0	0.099531988	0	0
2.379195453	3.013441734	38.72103898	16.2321815	99.13121176	1.112885579	0.00571134	0.009387738
0	54.12296249	17.8662971	47.4588927	0	2.637697922	0.129667576	0

Table 5: On-Road Exhaust and Wear (grams/mile)

Region	Calendar Year	Vehicle Category	Fuel	Concat	ROG_Mile	NOx_Mile	CO_Mile	SOx_Mile	PM10_Mile	PM2.5_Mile	CO2_Mile	CH4_Mile	N2O_Mile	TOG_Mile
San Diego County A	2027	HHDT	Gasoline	HHDT_Gasoline	0.717442244	5.114417543	30.93742482	0.020982494	0.116480852	0.039858152	2122.44142	0.13522596	0.16832817	1.046890039
San Diego County A	2027	HHDT	Diesel	HHDT_Diesel	0.015220976	1.75587514	0.069470674	0.014667582	0.141700317	0.062459412	1548.944864	0.000706975	0.244036894	0.017327923
San Diego County A	2027	LDA	Gasoline	LDA_Gasoline	0.008020264	0.031765558	0.643086393	0.00276009	0.016910926	0.005970464	279.1912273	0.002247052	0.004081793	0.01170315
San Diego County A	2027	LDA	Diesel	LDA_Diesel	0.031843007	0.130161127	0.524748261	0.002352812	0.027851675	0.016365608	248.3045937	0.001479047	0.03912049	0.036251146
San Diego County A	2027	LDT1	Gasoline	LDT1_Gasoline	0.034340563	0.130134889	1.460145769	0.003395621	0.019657933	0.007388518	343.4771528	0.007753207	0.009682059	0.050109669
San Diego County A	2027	LDT1	Diesel	LDT1_Diesel	0.306008454	1.307171322	2.054411719	0.004113701	0.265602412	0.242082804	434.140368	0.014213508	0.068398992	0.34837028
San Diego County A	2027	LDT2	Gasoline	LDT2_Gasoline	0.011533664	0.055147766	0.769381488	0.003411978	0.018498553	0.006561518	345.1316323	0.003063305	0.005322417	0.016829895
San Diego County A	2027	LDT2	Diesel	LDT2_Diesel	0.025919686	0.042797976	0.269988274	0.003040838	0.021875875	0.009845724	320.9155273	0.00120392	0.050560372	0.029507839
San Diego County A	2027	MHDT	Gasoline	MHDT_Gasoline	0.047426403	0.300694269	0.951119264	0.017088948	0.058458388	0.020063867	1728.5977	0.009949103	0.016646806	0.069204495
San Diego County A	2027	MHDT	Diesel	MHDT_Diesel	0.020329706	0.968743177	0.087014713	0.010686144	0.06671548	0.027762276	1128.491994	0.000944262	0.177794373	0.023143822
San Diego County A	2027	passenger	Gasoline	passenger_Gasolin	0.022058763	0.086795775	1.083189854	0.003240827	0.018681336	0.006827254	327.8192913	0.005204193	0.007192082	0.032188096
San Diego County A	2027	passenger	Diesel	passenger_Diesel	0.1674449	0.696825437	1.225889994	0.003405263	0.145233094	0.127594235	359.3752143	0.007777496	0.056619711	0.190624886
San Diego County A	2027	vendor	Gasoline	vendor_Gasoline	0.047426403	0.300694269	0.951119264	0.017088948	0.058458388	0.020063867	1728.5977	0.009949103	0.016646806	0.069204495
San Diego County A	2027	vendor	Diesel	vendor_Diesel	0.020329706	0.968743177	0.087014713	0.010686144	0.06671548	0.027762276	1128.491994	0.000944262	0.177794373	0.023143822
San Diego County A	2027	hhdt	Gasoline	hhdt_Gasoline	0.717442244	5.114417543	30.93742482	0.020982494	0.116480852	0.039858152	2122.44142	0.13522596	0.16832817	1.046890039
San Diego County A	2027	hhdt	Diesel	hhdt_Diesel	0.015220976	1.75587514	0.069470674	0.014667582	0.141700317	0.062459412	1548.944864	0.000706975	0.244036894	0.017327923

Table 6: On-Road Start Up and Evap (grams/trip)

Region	Calendar Year	Vehicle Category	Fuel	Concat	ROG_Trip	NOx_Trip	CO_Trip	SOx_Trip	PM10_Trip	PM2.5_Trip	CO2_Trip	CH4_Trip	N2O_Trip	TOG_Trip
San Diego County A	2027	HHDT	Gasoline	HHDT_Gasoline	0.843325011	0.060668528	6.071255582	0.000548122	0.000971903	0.000893629	55.44412902	0.000194889	0.001797306	0.843425343
San Diego County A	2027	HHDT	Diesel	HHDT_Diesel	0	2.946964062	0	0	0	0	0	0	0	0
San Diego County A	2027	LDA	Gasoline	LDA_Gasoline	0.563314732	0.221207953	2.629110389	0.00064502	0.001945036	0.001788389	65.24568918	0.058814012	0.03034643	0.588062957
San Diego County A	2027	LDA	Diesel	LDA_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	LDT1	Gasoline	LDT1_Gasoline	1.254716233	0.38353496	5.007038734	0.000832387	0.002838557	0.002609948	84.19845553	0.101759991	0.038473112	1.30455723
San Diego County A	2027	LDT1	Diesel	LDT1_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	LDT2	Gasoline	LDT2_Gasoline	0.620868896	0.28392414	3.060984675	0.000803924	0.001951696	0.001794512	81.31924457	0.070417242	0.034406678	0.650881346
San Diego County A	2027	LDT2	Diesel	LDT2_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	MHDT	Gasoline	MHDT_Gasoline	0.505234484	0.392666922	4.965108376	0.000435975	0.000512382	0.000471116	44.10014722	0.043922178	0.032049148	0.527362339
San Diego County A	2027	MHDT	Diesel	MHDT_Diesel	0	1.632123854	0	0	0	0	0	0	0	0
San Diego County A	2027	passenger	Gasoline	passenger_Gasolin	0.923404023	0.318050504	3.926043133	0.00077843	0.002393461	0.002200699	78.7404612	0.083187809	0.035424833	0.962014691
San Diego County A	2027	passenger	Diesel	passenger_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	vendor	Gasoline	vendor_Gasoline	0.505234484	0.392666922	4.965108376	0.000435975	0.000512382	0.000471116	44.10014722	0.043922178	0.032049148	0.527362339
San Diego County A	2027	vendor	Diesel	vendor_Diesel	0	1.632123854	0	0	0	0	0	0	0	0
San Diego County A	2027	hhdt	Gasoline	hhdt_Gasoline	0.843325011	0.060668528	6.071255582	0.000548122	0.000971903	0.000893629	55.44412902	0.000194889	0.001797306	0.843425343
San Diego County A	2027	hhdt	Diesel	hhdt_Diesel	0	2.946964062	0	0	0	0	0	0	0	0

Table 7: On-Road Start Idle and Evap (grams/vehicle/day)

Region	Calendar Year	Vehicle Category	Fuel	Concat	ROG_Vehicle	NOx_Vehicle	CO_Vehicle	SOx_Vehicle	PM10_Vehicle	PM2.5_Vehicle	CO2_Vehicle	CH4_Vehicle	N2O_Vehicle	TOG_Vehicle
San Diego County A	2027	HHDT	Gasoline	HHDT_Gasoline	5.718600364	0	0	0	0	0	0	0	0	5.718600364
San Diego County A	2027	HHDT	Diesel	HHDT_Diesel	4.902296126	56.7222722	71.59536681	0.103571828	0.028269537	0.027046609	10937.52575	0.227698958	1.723211636	5.58089097
San Diego County A	2027	LDA	Gasoline	LDA_Gasoline	1.361790079	0	0	0	0	0	0	0	0	1.361790079
San Diego County A	2027	LDA	Diesel	LDA_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	LDT1	Gasoline	LDT1_Gasoline	3.06775705	0	0	0	0	0	0	0	0	3.06775705
San Diego County A	2027	LDT1	Diesel	LDT1_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	LDT2	Gasoline	LDT2_Gasoline	1.405134745	0	0	0	0	0	0	0	0	1.405134745
San Diego County A	2027	LDT2	Diesel	LDT2_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	MHDT	Gasoline	MHDT_Gasoline	3.306823131	0.078031074	13.57630291	0.004908615	0	0	496.5209684	0.250712847	0.006874629	3.742668885
San Diego County A	2027	MHDT	Diesel	MHDT_Diesel	0.191690028	10.65606858	6.755507329	0.019008823	0.014561293	0.013931378	2007.394248	0.008903505	0.316265781	0.218224505
San Diego County A	2027	passenger	Gasoline	passenger_Gasolin	2.225609731	0	0	0	0	0	0	0	0	2.225609731
San Diego County A	2027	passenger	Diesel	passenger_Diesel	0	0	0	0	0	0	0	0	0	0
San Diego County A	2027	vendor	Gasoline	vendor_Gasoline	3.306823131	0.078031074	13.57630291	0.004908615	0	0	496.5209684	0.250712847	0.006874629	3.742668885
San Diego County A	2027	vendor	Diesel	vendor_Diesel	0.191690028	10.65606858	6.755507329	0.019008823	0.014561293	0.013931378	2007.394248	0.008903505	0.316265781	0.218224505
San Diego County A	2027	hhdt	Gasoline	hhdt_Gasoline	5.718600364	0	0	0	0	0	0	0	0	5.718600364
San Diego County A	2027	hhdt	Diesel	hhdt_Diesel	4.902296126	56.7222722	71.59536681	0.103571828	0.028269537	0.027046609	10937.52575	0.227698958	1.723211636	5.58089097

Note: Assume 347 days of operation

Table 8: Entrained Road Dust Emission Factors - Paved (pounds/mile)

Paved	k	sL	W	p	N	Uncontrolled EF	Controled EF
PM10	1	0.1	2.4	2	365	0.000661537	0.000661537
PM2.5	0.25	0.1	2.4	2	365	0.000165384	0.000165384

Table 9: Entrained Road Dust Emission Factors - Unpaved (pounds/mile)

Unpaved	k	s	M	S2	C	p	Uncontrolled EF	Controled EF
PM10	1.8	8.5	0.5	40	0.00047	2	1.463708676	0.368854586
PM2.5	0.18	8.5	0.5	40	0.00036	2	0.146059583	0.036807015

Table 10: Grading Emission Factor (pounds/acre/day)

Pollutant	S	F	Wb	UC1	UC2	Uncontrolled EF	Controlled EF
PM10	7.1	0.6	12	43560	5280	1.060500375	0.413595146
PM2.5	7.1	0.031	12	43560	5280	0.114509168	0.044658576

Table 11: Bulldozing Emission Factor (pounds/hour)

Pollutant	C	s	M	F	Uncontrolled EF	Controlled EF
PM10	1	6.9	7.9	0.75	0.752760759	0.293576696
PM2.5	5.7	6.9	7.9	0.105	0.413778428	0.161373587

Table 12: Grading Efficiency by Equipment Type

Equipment	Acres Graded per 8 hours
Crawler Tractors	0.5
Graders	0.5
Rubber Tired Dozers	0.5
Scrapers	1

Table 13: Global Warming Potentials

Pollutant	GWP
CO2	1
CH4	25
N2O	298
SF6	23500

Table 14: Activity List

Index	Component	Activity Name	Workforce	Start Date	End Date	Days Per Week	Schedule Days	Working Days	SDAPCD Percent
S-01	General	Survey and Staking	4	8/1/2027	2/1/2031	6	1052	1052	1
S-02	General	Utility Locates	10	8/1/2027	2/1/2031	6	1052	1052	1
S-03	General	Mobilization	26	11/1/2027	12/31/2027	6	47	47	1
S-04	230 kV Overhead	Access Road Construction	28	1/2/2028	8/31/2028	6	203	203	1
S-05	230 kV Overhead	Conventional Structure Foundation Installation	42	2/2/2028	2/2/2029	6	303	303	1
S-06	230 kV Overhead	Conventional Structure Installation	33	4/2/2028	2/2/2029	6	252	252	1
S-07	230 kV Overhead	Helicopter Support	14	1/2/2028	10/14/2028	6	239	239	1
S-08	230 kV Overhead	Helicopter Landing Pad Construction	2	1/2/2028	8/31/2028	6	203	203	1
S-09	230 kV Overhead	Helicopter Landing Platform Construction	1	1/2/2028	8/31/2028	6	203	203	1
S-10	230 kV Overhead	Helicopter Site Preparation	5	1/2/2028	8/31/2028	6	203	203	1
S-11	230 kV Overhead	Helicopter Structure Foundation Installation	1	1/16/2028	9/30/2028	6	216	216	1
S-12	230 kV Overhead	Helicopter Structure Installation	0	4/1/2028	10/14/2028	6	164	164	1
S-13	230 kV Overhead	Conductor Installation	43	2/14/2029	5/14/2029	6	76	76	1
S-14	230 kV Underground	Excavate Trench	30	6/1/2029	2/1/2030	6	201	201	1
S-15	230 kV Underground	Duct Bank & Conduit Installation	20	7/1/2029	3/1/2030	6	199	199	1
S-16	230 kV Underground	Cable Installation	6	3/2/2030	11/30/2030	6	227	227	1
S-17	230 kV Underground	Paving	24	4/2/2031	12/1/2031	6	201	201	1
S-18	Suncrest Substation Mods	Site Preparation	19	6/1/2028	9/1/2028	6	78	78	1
S-19	Suncrest Substation Mods	Below-Grade Construction	50	9/2/2028	8/31/2029	6	300	300	1
S-20	Suncrest Substation Mods	Above-Grade Construction	48	9/1/2029	8/31/2032	6	903	903	1
S-21	General	Commissioning and Testing	27	1/2/2032	10/31/2032	6	253	253	1
S-22	General	Site & ROW Restoration (overhead)	22	6/1/2029	10/31/2029	6	127	127	1
S-23	General	Site & ROW Restoration (underground)	11	12/1/2030	3/30/2031	6	98	98	1

Table 15: Equipment List

EquipIndex	Activity Number	Activity Index	Activity Name	Equipment Name	Est. Workforce	HP	Fuel Type	Quantity	Days Manual Override*	Days Used	Hours Per Day	EquipConcat	On-Off	Earth Moving	Off Count	On Count	Earth Moving Count	On Type	CalEEModType	On Distance	Trips Per Day	VMT	Total VMT	Total Trips per day	Automobile?	Exempt
1	1	S-01	Survey and Staking	Pickup - 1/2 Ton	2	395	Gasoline	2		1052	8	Pickup - 1/2 Ton_395	on			1		passenger		25	2	100	105200	4	Automobile	Yes
2	2	S-02	Utility Locates	Air Compressor 340/390hp	0	390	Diesel	1		1052	8	Air Compressor 340/390hp_390	off		1				Air Compressors							
3	2	S-02	Utility Locates	Backhoe	1	150	Diesel	2		1052	6	Backhoe_150	off		2				Tractors/Loaders/Backhoes							
4	2	S-02	Utility Locates	Flatbed truck	2	350	Diesel	2		1052	10	Flatbed truck_350	on			2		hhdt		20	2	80	84160	4	Const Vehicle	
5	2	S-02	Utility Locates	Pickup - 1 Ton	2	410	Diesel	2		1052	10	Pickup - 1 Ton_410	on			3		passenger		25	2	100	105200	4	Automobile	Yes
6	3	S-03	Mobilization	Backhoe	1	150	Diesel	2		47	6	Backhoe_150	off		3				Tractors/Loaders/Backhoes							
7	3	S-03	Mobilization	Boom truck	2	150	Diesel	1		47	3	Boom truck_150	off		4				Cranes							
8	3	S-03	Mobilization	Flatbed truck	2	350	Diesel	1		47	10	Flatbed truck_350	on			4		hhdt		20	2	40	1880	2	Const Vehicle	
9	3	S-03	Mobilization	Forklift	1	100	Diesel	2		47	8	Forklift_100	off		5				Forklifts							
10	3	S-03	Mobilization	Gang truck	2	350	Diesel	2		47	8	Gang truck_350	on			5		passenger		25	2	100	4700	4	Const Vehicle	
11	3	S-03	Mobilization	Generator 150-260 kW	0	260	Diesel	1		47	10	Generator 150-260 kW_260	off		6				Generator Sets							
12	3	S-03	Mobilization	Light plant	0	10	Diesel	4		47	2	Light plant_10	off		7				Other Construction Equipment							
13	3	S-03	Mobilization	Pickup - 1 Ton	2	410	Diesel	4		47	2	Pickup - 1 Ton_410	on			6		passenger		25	2	200	9400	8	Automobile	Yes
14	3	S-03	Mobilization	Flatbed Truck	2	350	Diesel	2		47	3	Flatbed Truck_350	on			7		hhdt		20	2	80	3760	4	Const Vehicle	
15	3	S-03	Mobilization	Water holding tanks	0	0	Diesel	2		47	10	Water holding tanks_0	off		8				Other Construction Equipment							
16	3	S-03	Mobilization	Water truck	1	300	Diesel	2		47	10	Water truck_300	on			8		hhdt		25	2	100	4700	4	Const Vehicle	
17	4	S-04	Access Road Construction	Pickup - 1/2 ton	2	395	Gasoline	2		203	2	Pickup - 1/2 ton_395	on			9		passenger		25	2	100	20300	4	Automobile	Yes
18	4	S-04	Access Road Construction	Pickup - 1 ton	2	410	Diesel	4		203	2	Pickup - 1 ton_410	on			10		passenger		25	2	200	40600	8	Automobile	Yes
19	4	S-04	Access Road Construction	Motor Grader	1	250	Diesel	2		203	6	Motor Grader_250	off	grading	9		1		Graders							
20	4	S-04	Access Road Construction	Dump Truck	1	415	Diesel	3		203	10	Dump Truck_415	on			11		hhdt		25	2	150	30450	6	Const Vehicle	
21	4	S-04	Access Road Construction	Skid steer loader	1	74	Diesel	1		203	4	Skid steer loader_74	off		10				Skid Steer Loaders							
22	4	S-04	Access Road Construction	Water Truck	1	300	Diesel	2		203	6	Water Truck_300	on			12		hhdt		25	2	100	20300	4	Const Vehicle	
23	4	S-04	Access Road Construction	D6 Type Dozer	1	250	Diesel	1		203	6	D6 Type Dozer_250	off	bulldozing	11		2		Crawler Tractors							
24	4	S-04	Access Road Construction	Excavator	1	250	Diesel	2		203	4	Excavator_250	off		12				Excavators							
25	4	S-04	Access Road Construction	Vibratory Roller	1	125	Diesel	1		203	4	Vibratory Roller_125	off		13				Rollers							
26	4	S-04	Access Road Construction	Bulldozer	1	250	Diesel	1		203	6	Bulldozer_250	off	bulldozing	14		3		Crawler Tractors							
27	4	S-04	Access Road Construction	Road Grader	1	250	Diesel	1		203	6	Road Grader_250	off	grading	15		4		Graders							
28	4	S-04	Access Road Construction	Loader	1	230	Diesel	1		203	2	Loader_230	off		16				Tractors/Loaders/Backhoes							
29	4	S-04	Access Road Construction	Mower	1	48	Diesel	1		203	3	Mower_48	off		17				Tractors/Loaders/Backhoes							
30	5	S-05	Conventional Structure Foundation Installation	Compressor	0	24	Diesel	1		303	6	Compressor _24	off		18				Air Compressors							
31	5	S-05	Conventional Structure Foundation Installation	Boom truck	2	150	Diesel	1		303	3	Boom truck_150	off		19				Cranes							
32	5	S-05	Conventional Structure Foundation Installation	Pressure Digger - Lo-Drill (Tracked)	1	275	Diesel	1		303	8	ssure Digger - Lo-Drill (Tracked)	off		20				Bore/Drill Rigs							
33	5	S-05	Conventional Structure Foundation Installation	Concrete Truck	2	425	Diesel	4		303	5	Concrete Truck_425	on			13		hhdt		20	2	160	48480	8	Const Vehicle	
34	5	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	2	410	Diesel	4		303	2	Pickup - 1 Ton_410	on			14		passenger		25	2	200	60600	8	Automobile	Yes
35	5	S-05	Conventional Structure Foundation Installation	Water Truck	1	300	Diesel	2		303	6	Water Truck_300	on			15		hhdt		25	2	100	30300	4	Const Vehicle	
36	5	S-05	Conventional Structure Foundation Installation	Dump Truck	1	415	Diesel	3		303	10	Dump Truck_415	on			16		hhdt		25	2	150	45450	6	Const Vehicle	
37	5	S-05	Conventional Structure Foundation Installation	Skid steer loader	1	74	Diesel	1		303	6	Skid steer loader_74	off		21				Skid Steer Loaders							
38	5	S-05	Conventional Structure Foundation Installation	Forklift - 10 K Reach	2	130	Diesel	2		303	2	Forklift - 10 K Reach_130	off		22				Rough Terrain Forklifts							
39	5	S-05	Conventional Structure Foundation Installation	Crane - 35 Ton (Manlift)	4	250	Diesel	2		303	5	Crane - 35 Ton (Manlift)_250	off		23				Cranes							
40	5	S-05	Conventional Structure Foundation Installation	844 Loader	1	417	Diesel	1		303	6	844 Loader_417	off		24				Rubber Tired Loaders							
41	5	S-05	Conventional Structure Foundation Installation	Rough Terrain Crane	4	185	Diesel	1		303	6	Rough Terrain Crane_185	off		25				Cranes							
42	6	S-06	Conventional Structure Installation	Crane - 35 Ton (Manlift)	4	250	Diesel	2		252	2	Crane - 35 Ton (Manlift)_250	off		26				Cranes							
43	6	S-06	Conventional Structure Installation	Pickup - 1/2 ton	2	395	Gasoline	4		252	2	Pickup - 1/2 ton_395	on			17		passenger		25	2	200	50400	8	Automobile	Yes
44	6	S-06	Conventional Structure Installation	Forklift - 15 K Reach	2	130	Diesel	1		252	1	Forklift - 15 K Reach_130	off		27				Rough Terrain Forklifts							
45	6	S-06	Conventional Structure Installation	Pickup - 1 ton	2	410	Diesel	4		252	2	Pickup - 1 ton_410	on			18		passenger		25	2	200	50400	8	Automobile	Yes
46	6	S-06	Conventional Structure Installation	Crane - 200 Ton	4	275	Diesel	1		252	4	Crane - 200 Ton_275	off		28				Cranes							
47	6	S-06	Conventional Structure Installation	844 Loader	1	417	Diesel	1		252	6	844 Loader_417	off		29				Rubber Tired Loaders							
48	6	S-06	Conventional Structure Installation	Water Truck	1	300	Diesel	2		252	6	Water Truck_300	on			19		hhdt		25	2	100	25200	4	Const Vehicle	
49	10	S-10	Helicopter Site Preparation	Helicopter	0	700	Jet	0		203	6	Helicopter_700	helicopter													
50	10	S-10	Helicopter Site Preparation	Jet Fuel Truck	2	300	Diesel	1		203	4	Jet Fuel Truck_300	on			20		vendor		20	2	40	8120	2	Const Vehicle	
51	10	S-10	Helicopter Site Preparation	Mower/Veg Clearing Equipment	1	50	Diesel	2		203	3	Mower/Veg Clearing Equipment_5	off		30				Other General Industrial Equipmer							
52	10	S-10	Helicopter Site Preparation	Chipper	1	50	Diesel	1		203	3	Chipper_50	off		31				Other General Industrial Equipmer							
53	10	S-10	Helicopter Site Preparation	Jackhammer	0	0	Diesel	1		203	2	Jackhammer_0	off		32				Other Construction Equipment							
54	7	S-07	Helicopter Support	Heavy-Duty Helicopter	6	3200	Jet	1		239	2	Heavy-Duty Helicopter_3200	helicopter													
55	7	S-07	Helicopter Support	Helicopter	6	700	Jet	1		239	4	Helicopter_700	helicopter													
56	7	S-07	Helicopter Support	Jet Fuel Truck	2	300	Diesel	1		239	4	Jet Fuel Truck_300	on			21		vendor		20	2	40	9560	2	Const Vehicle	
57	8	S-08	Helicopter Landing Pad Construction	Air Compressor 340/390hp	0	390	Diesel	1		203	4	Air Compressor 340/390hp_390	off		33				Air Compressors							
58	8	S-08	Helicopter Landing Pad Construction	Skid steer loader	1	74	Diesel	1		203	4	Skid steer loader_74	off		34				Skid Steer Loaders							
59	8	S-08	Helicopter Landing Pad Construction	Excavator - Mini	1	108	Diesel	1		203	4	Excavator - Mini_108	off		35				Excavators							
60	8	S-08	Helicopter Landing Pad Construction	Fire Deck (5 hp pump)	0	5	Diesel	1		203	1	Fire Deck (5 hp pump)_5	off		36				Pumps							
61	8	S-08	Helicopter Landing Pad Construction	Water Buffalo Deck (5 hp pump)	0	5	Diesel	1		203	2	Water Buffalo Deck (5 hp pump)_5	off		37				Pumps							
62	8	S-08	Helicopter Landing Pad Construction	Vibrating Plate	0	14	Diesel	1		203	4	Vibrating Plate_14	off		38				Plate Compactors							
63	9	S-09	Helicopter Landing Platform Construction	Air Compressor 340/390hp	0	390	Diesel	1		203	4	Air Compressor 340/390hp_390	off		39				Air Compressors							
64	9	S-09	Helicopter Landing Platform Construction	Fire Deck (5 hp pump)	0	5	Diesel	1		203	1	Fire Deck (5 hp pump)_5	off		40				Pumps							
65	9	S-09	Helicopter Landing Platform Construction	Water Buffalo Deck (5 hp pump)	0	5	Diesel	1		203	2	Water Buffalo Deck (5 hp pump)_5	off		41				Pumps							
66	9	S-09	Helicopter Landing Platform Construction	Generator 25 kW	0	36	Diesel	1		203	2	Generator 25 kW_36	off		42				Generator Sets							
67	9	S-09	Helicopter Landing Platform Construction	Testing Jack (5 hp pump)	0	5	Diesel	1		203	2	Testing Jack (5 hp pump)_5	off		43				Pumps							
68	9	S-09	Helicopter Landing Platform Construction	Micropile Drill Power Unit	1	310	Diesel	1		203	8	Micropile Drill Power Unit_310	off		44				Bore/Drill Rigs							
69	9	S-09	Helicopter Landing Platform Construction	Refueler (small fuel transfer station)	0	0	Diesel	1		203	1	fueler (small fuel transfer station)	off		45				Other Construction Equipment							
70	9	S-09	Helicopter Landing Platform Construction	Grout Plant	0	20	Diesel	1		203	8	Grout Plant_20	off		46				Cement and Mortar Mixers							
71	11	S-11	Helicopter Structure Foundation Installation	Air Compressor 340/390hp	0	390	Diesel	1		216	4	Air Compressor 340/390hp_390	off		47				Air Compressors							
72	11	S-11	Helicopter Structure Foundation Installation	Fire Deck (5 hp pump)	0	5	Diesel	1		216	1	Fire Deck (5 hp pump)_5	off		48				Pumps							
73	11	S-11	Helicopter Structure Foundation Installation	Water Buffalo Deck (5 hp pump)	0	5	Diesel	1		216	2	Water Buffalo Deck (5 hp pump)_5	off		49				Pumps							
74	11	S-11	Helicopter Structure Foundation Installation	Generator 25 kW	0	36	Diesel	1		216	2	Generator 25 kW_36	off		50				Generator Sets							
75	11	S-11	Helicopter Structure Foundation Installation	Testing Jack (5 hp pump)	0	5	Diesel	1		216	2	Testing Jack (5 hp pump)_5	off		51				Pumps							
76	11	S-11	Helicopter Structure Foundation Installation	Micropile Drill Power Unit	1	310	Diesel	1		216	8	Micropile Drill Power Unit_310	off		52				Bore/Drill Rigs							
77	11	S-11	Helicopter Structure Foundation Installation	Refueler (small fuel transfer station)	0	0	Diesel	1		216	1	fueler (small fuel transfer station)	off		53				Other Construction Equipment							
78	11	S-11	Helicopter Structure Foundation Installation	Grout Plant	0	20	Diesel	1		216	8	Grout Plant_20	off		54				Cement and Mortar Mixers							
79	12	S-12	Helicopter Structure Installation	Fire Deck (5 hp pump)	0	5	Diesel	1		164	1	Fire Deck (5 hp pump)_5	off		55				Pumps							
80	12	S-12	Helicopter Structure Installation	Water Buffalo Deck (5 hp pump)	0	5	Diesel	1		164	2	Water Buffalo Deck (5 hp pump)_5	off		56				Pumps							
81	12	S-12	Helicopter Structure Installation	Generator 25 kW	0	36	Diesel	1		164	2	Generator 25 kW_36	off		57				Generator Sets							
82	13	S-13	Conductor Installation	Helicopter	0	700	Jet	0		76	10	Helicopter_700	helicopter													
83	13	S-13	Conductor Installation	Jet Fuel Truck	0	300	Diesel	0		76	10	Jet Fuel Truck_300	on			22		vendor		20	2	0	0	0	Const Vehicle	
84	13	S-13	Conductor Installation	Crane - 35 Ton (Manlift)	4	250	Diesel	3		76	5	Crane - 35 Ton (Manlift)_250	off		58				Cranes							
85	13	S-13	Conductor Installation	Pickup - 1/2 ton	2	395	Gasoline	4		76	2	Pickup - 1/2 ton_395	on			23		passenger		25	2	200	15200	8	Automobile	Yes
86	13	S-13	Conductor Installation	Pickup - 1 Ton	2	410	Diesel	4		76	2	Pickup - 1 Ton_410	on			24		passenger		25	2	200	15200	8	Automobile	Yes

EquipIndex	Activity Number	Activity Index	Activity Name	Equipment Name	Est. Workforce	HP	Fuel Type	Quantity	Days Manual Override*	Days Used	Hours Per Day	EquipConcat	On-Off	Earth Moving	Off Count	On Count	Earth Moving Count	On Type	CalEEModType	On Distance	Trips Per Day	VMT	Total VMT	Total Trips per day	Automobile?	Exempt
87	13	S-13	Conductor Installation	D8 Sag Dozer	1	200	Diesel	3		76	10	D8 Sag Dozer_200	off		59				Crawler Tractors							
88	13	S-13	Conductor Installation	Wire Puller	3	250	Diesel	1		76	5	Wire Puller_250	off		60				Other Construction Equipment							
89	13	S-13	Conductor Installation	Water Truck	1	300	Diesel	2		76	6	Water Truck_300	on			25		hhdt		25	2	100	7600	4	Const Vehicle	
90	13	S-13	Conductor Installation	Wire Trailer/ Tensioner	3	250	Diesel	1		76	5	Wire Trailer/ Tensioner_250	off		61				Other Construction Equipment							
91	13	S-13	Conductor Installation	Wire Puller	0	250	Diesel	0		76	3	Wire Puller_250	off		62				Other Construction Equipment							
92	13	S-13	Conductor Installation	Boom Truck w/Hydraulic Pole Puller	2	150	Diesel	1		76	1	m Truck w/Hydraulic Pole Puller_	off		63				Cranes							
93	13	S-13	Conductor Installation	Hydraulic Pole Puller	2	150	Diesel	1		76	1	Hydraulic Pole Puller_150	off		64				Cranes							
94	14	S-14	Excavate Trench	Backhoe	1	150	Diesel	2		201	6	Backhoe_150	off		65				Tractors/Loaders/Backhoes							
95	14	S-14	Excavate Trench	Arrow Board	0	10	Diesel	2		201	8	Arrow Board_10	off		66				Signal Boards							
96	14	S-14	Excavate Trench	Air Compressor 340/390hp	0	390	Diesel	1		201	8	Air Compressor 340/390hp_390	off		67				Air Compressors							
97	14	S-14	Excavate Trench	Concrete Saw	1	13	Diesel	1		201	2	Concrete Saw_13	off		68				Concrete/Industrial Saws							
98	14	S-14	Excavate Trench	Flatbed truck	2	350	Diesel	1		201	10	Flatbed truck_350	on			26		hhdt		20	2	40	8040	2	Const Vehicle	
99	14	S-14	Excavate Trench	Loader	1	230	Diesel	1		201	6	Loader_230	off		69				Tractors/Loaders/Backhoes							
100	14	S-14	Excavate Trench	Foreman Truck	2	300	Diesel	3		201	8	Foreman Truck_300	on			27		passenger		20	2	120	24120	6	Automobile	Yes
101	14	S-14	Excavate Trench	Pickup - 1 Ton	2	410	Diesel	4		201	2	Pickup - 1 Ton_410	on			28		passenger		25	2	200	40200	8	Automobile	Yes
102	14	S-14	Excavate Trench	Trackhoe	1	250	Diesel	4		201	4	Trackhoe_250	off		70				Excavators							
103	14	S-14	Excavate Trench	Trencher	1	75	Diesel	2		201	5	Trencher_75	off		71				Trenchers							
104	14	S-14	Excavate Trench	Dump Truck	1	415	Diesel	3		201	8	Dump Truck_415	on			29		hhdt		25	2	150	30150	6	Const Vehicle	
105	14	S-14	Excavate Trench	Water truck	1	300	Diesel	1		201	6	Water truck_300	on			30		hhdt		25	2	50	10050	2	Const Vehicle	
106	14	S-14	Excavate Trench	Light plant	0	10	Diesel	4		201	10	Light plant_10	off		72				Other Construction Equipment							
107	15	S-15	Duct Bank & Conduit Installation	Backhoe	1	150	Diesel	2		199	6	Backhoe_150	off		73				Tractors/Loaders/Backhoes							
108	15	S-15	Duct Bank & Conduit Installation	Arrow Board	0	10	Diesel	2		199	8	Arrow Board_10	off		74				Signal Boards							
109	15	S-15	Duct Bank & Conduit Installation	Air Compressor 340/390hp	0	390	Diesel	1		199	8	Air Compressor 340/390hp_390	off		75				Air Compressors							
110	15	S-15	Duct Bank & Conduit Installation	Flatbed truck	2	350	Diesel	1		199	10	Flatbed truck_350	on			31		hhdt		20	2	40	7960	2	Const Vehicle	
111	15	S-15	Duct Bank & Conduit Installation	Loader	1	230	Diesel	1		199	6	Loader_230	off		76				Tractors/Loaders/Backhoes							
112	15	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	2	410	Diesel	4		199	2	Pickup - 1 Ton_410	on			32		passenger		25	2	200	39800	8	Automobile	Yes
113	15	S-15	Duct Bank & Conduit Installation	Trackhoe	1	250	Diesel	4		199	4	Trackhoe_250	off		77				Excavators							
114	15	S-15	Duct Bank & Conduit Installation	Trencher	1	75	Diesel	2		199	5	Trencher_75	off		78				Trenchers							
115	15	S-15	Duct Bank & Conduit Installation	Water truck	1	300	Diesel	1		199	6	Water truck_300	on			33		hhdt		25	2	50	9950	2	Const Vehicle	
116	16	S-16	Cable Installation	Cable Reel	3	175	Diesel	1		227	5	Cable Reel_175	off		79				Other Construction Equipment							
117	16	S-16	Cable Installation	Arrow Board	0	10	Diesel	2		227	8	Arrow Board_10	off		80				Signal Boards							
118	16	S-16	Cable Installation	Pulling Rig	3	175	Diesel	1		227	5	Pulling Rig_175	off		81				Other Construction Equipment							
119	17	S-17	Paving	Concrete Truck	2	425	Diesel	5		201	2	Concrete Truck_425	on			34		hhdt		20	2	200	40200	10	Const Vehicle	
120	17	S-17	Paving	Grinder	1	15	Diesel	1		201	3	Grinder_15	off		82				Other Construction Equipment							
121	17	S-17	Paving	Arrow Board	0	10	Diesel	2		201	8	Arrow Board_10	off		83				Signal Boards							
122	17	S-17	Paving	Bitumen (emulsion) sprayer, trailer-mount	0	5	Diesel	1		201	1	n (emulsion) sprayer, trailer-mou	off		84				Other Construction Equipment							
123	17	S-17	Paving	A/C Roller 5-7 Ton	2	74	Diesel	1		201	8	A/C Roller 5-7 Ton_74	off		85				Rollers							
124	17	S-17	Paving	Backhoe	1	150	Diesel	1		201	6	Backhoe_150	off		86				Tractors/Loaders/Backhoes							
125	17	S-17	Paving	Flatbed truck	2	350	Diesel	1		201	10	Flatbed truck_350	on			35		hhdt		20	2	40	8040	2	Const Vehicle	
126	17	S-17	Paving	Pickup - 1 Ton	2	410	Diesel	4		201	2	Pickup - 1 Ton_410	on			36		passenger		25	2	200	40200	8	Automobile	Yes
127	18	S-18	Site Preparation	Backhoe	1	150	Diesel	2		78	6	Backhoe_150	off		87				Tractors/Loaders/Backhoes							
128	18	S-18	Site Preparation	Boom truck	2	150	Diesel	1		78	1	Boom truck_150	off		88				Cranes							
129	18	S-18	Site Preparation	Flatbed truck	0	350	Diesel	0		78	10	Flatbed truck_350	on			37		hhdt		20	2	0	0	0	Const Vehicle	
130	18	S-18	Site Preparation	Forklift	1	100	Diesel	1		78	8	Forklift_100	off		89				Forklifts							
131	18	S-18	Site Preparation	Loader	1	230	Diesel	1		78	2	Loader_230	off		90				Tractors/Loaders/Backhoes							
132	18	S-18	Site Preparation	Pickup - 1 Ton	2	410	Diesel	4		78	2	Pickup - 1 Ton_410	on			38		passenger		25	2	200	15600	8	Automobile	Yes
133	18	S-18	Site Preparation	Flatbed Truck	2	350	Diesel	2		78	3	Flatbed Truck_350	on			39		hhdt		20	2	80	6240	4	Const Vehicle	
134	18	S-18	Site Preparation	Water truck	1	300	Diesel	1		78	6	Water truck_300	on			40		hhdt		25	2	50	3900	2	Const Vehicle	
135	19	S-19	Below-Grade Construction	Water Truck	1	300	Diesel	1		300	6	Water Truck_300	on			41		hhdt		25	2	50	15000	2	Const Vehicle	
136	19	S-19	Below-Grade Construction	Excavator	1	250	Diesel	2		300	8	Excavator_250	off		91				Excavators							
137	19	S-19	Below-Grade Construction	Forklift - 15 K Reach	2	130	Diesel	1		300	0	Forklift - 15 K Reach_130	off		92				Rough Terrain Forklifts							
138	19	S-19	Below-Grade Construction	Backhoe - 2X4	1	68	Diesel	2		300	6	Backhoe - 2X4_68	off		93				Tractors/Loaders/Backhoes							
139	19	S-19	Below-Grade Construction	Pickup - 1/2 Ton	2	395	Gasoline	4		300	2	Pickup - 1/2 Ton_395	on			42		passenger		25	2	200	60000	8	Automobile	Yes
140	19	S-19	Below-Grade Construction	Pickup - 1 Ton	2	410	Diesel	4		300	2	Pickup - 1 Ton_410	on			43		passenger		25	2	200	60000	8	Automobile	Yes
141	19	S-19	Below-Grade Construction	Excavator - Mini	1	108	Diesel	1		300	8	Excavator - Mini_108	off		94				Excavators							
142	19	S-19	Below-Grade Construction	Generator 25 kW	0	36	Diesel	1		300	8	Generator 25 kW_36	off		95				Generator Sets							
143	19	S-19	Below-Grade Construction	Concrete Truck	2	425	Diesel	4		300	5	Concrete Truck_425	on			44		hhdt		20	2	160	48000	8	Const Vehicle	
144	19	S-19	Below-Grade Construction	Loader	1	230	Diesel	2		300	8	Loader_230	off		96				Tractors/Loaders/Backhoes							
145	19	S-19	Below-Grade Construction	Pressure Digger - Lo-Drill (Tracked)	1	275	Diesel	1		300	5	ssure Digger - Lo-Drill (Tracked)_	off		97				Bore/Drill Rigs							
146	19	S-19	Below-Grade Construction	Dump Truck	1	415	Diesel	3		300	10	Dump Truck_415	on			45		hhdt		25	2	150	45000	6	Const Vehicle	
147	19	S-19	Below-Grade Construction	Tool - Van/Conex 20'	2	0	Diesel	1		300	3	Tool - Van/Conex 20'_0	on			46		passenger		25	2	50	15000	2	Const Vehicle	
148	19	S-19	Below-Grade Construction	Trencher	1	75	Diesel	2		300	5	Trencher_75	off		98				Trenchers							
149	19	S-19	Below-Grade Construction	Skid steer loader	1	74	Diesel	2		300	8	Skid steer loader_74	off		99				Skid Steer Loaders							
150	19	S-19	Below-Grade Construction	Wire Trailer/ Tensioner	3	250	Diesel	1		300	5	Wire Trailer/ Tensioner_250	off		100				Other Construction Equipment							
151	19	S-19	Below-Grade Construction	Wire Puller	3	250	Diesel	1		300	3	Wire Puller_250	off		101				Other Construction Equipment							
152	20	S-20	Above-Grade Construction	Wire Trailer/ Tensioner	3	250	Diesel	1		903	5	Wire Trailer/ Tensioner_250	off		102				Other Construction Equipment							
153	20	S-20	Above-Grade Construction	Wire Puller	3	250	Diesel	1		903	3	Wire Puller_250	off		103				Other Construction Equipment							
154	20	S-20	Above-Grade Construction	Pickup - 1/2 Ton	2	395	Gasoline	4		903	2	Pickup - 1/2 Ton_395	on			47		passenger		25	2	200	180600	8	Automobile	Yes
155	20	S-20	Above-Grade Construction	Pickup - 1 Ton	2	410	Diesel	4		903	2	Pickup - 1 Ton_410	on			48		passenger		25	2	200	180600	8	Automobile	Yes
156	20	S-20	Above-Grade Construction	Welding Truck	1	250	Diesel	2		903	2	Welding Truck_250	on			49		passenger		25	2	100	90300	4	Const Vehicle	
157	20	S-20	Above-Grade Construction	Generator 25 kW	0	36	Diesel	2		903	8	Generator 25 kW_36	off		104				Generator Sets							
158	20	S-20	Above-Grade Construction	Crane - 35 Ton (Manlift)	4	250	Diesel	2		903	5	Crane - 35 Ton (Manlift)_250	off		105				Cranes							
159	20	S-20	Above-Grade Construction	Forklift - 10 K Reach	2	130	Diesel	2		903	8	Forklift - 10 K Reach_130	off		106				Rough Terrain Forklifts							
160	20	S-20	Above-Grade Construction	Forklift - 15 K Reach	2	130	Diesel	1		903	8	Forklift - 15 K Reach_130	off		107				Rough Terrain Forklifts							
161	20	S-20	Above-Grade Construction	Loader	1	230	Diesel	2		903	8	Loader_230	off		108				Tractors/Loaders/Backhoes							
162	20	S-20	Above-Grade Construction	120' Manlift	2	74	Diesel	2		903	5	120' Manlift_74	off		109				Aerial Lifts							
163	20	S-20	Above-Grade Construction	Crane - 200 Ton	4	275	Diesel	1		903	4	Crane - 200 Ton_275	off		110				Cranes							
164	21	S-21	Commissioning and Testing	Pickup - 1/2 Ton	2	395	Gasoline	4		253	2	Pickup - 1/2 Ton_395	on			50		passenger		25	2	200	50600	8	Automobile	Yes
165	21	S-21	Commissioning and Testing	Pickup - 1 Ton	2	410	Diesel	4		253	2	Pickup - 1 Ton_410	on			51		passenger		25	2	200	50600	8	Automobile	Yes
166	21	S-21	Commissioning and Testing	Crane - 35 Ton (Manlift)	4	250	Diesel	1		253	5	Crane - 35 Ton (Manlift)_250	off		111				Cranes							
167	21	S-21	Commissioning and Testing	Water Truck	1	300	Diesel	1		253	6	Water Truck_300	on			52		hhdt		25	2	50	12650	2	Const Vehicle	
168	21	S-21	Commissioning and Testing	Tool - Van/Conex 20'	2	0	Diesel	3		253	3	Tool - Van/Conex 20'_0	on			53		passenger		25	2	150	37950	6	Const Vehicle	
169	22	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	2	395	Gasoline	4		127	2	Pickup - 1/2 ton_395	on			54		passenger		25	2	200	25400	8	Automobile	Yes
170	22	S-22	Site & ROW Restoration (overhead)	Dump Truck	1	415	Diesel	2		127	10	Dump Truck_415	on			55		hhdt		25	2	100	12700	4	Const Vehicle	
171	22	S-22	Site & ROW Restoration (overhead)	Skid steer loader	1	74	Diesel	1		127	6	Skid steer loader_74	off		112				Skid Steer Loaders							
172	22	S-22	Site & ROW Restoration (overhead)	Water Truck	1	300	Diesel	2		127	6	Water Truck_300	on			56		hhdt		25	2	100	12700	4	Const Vehicle	

EquipIndex	Activity Number	Activity Index	Activity Name	Equipment Name	Est. Workforce	HP	Fuel Type	Quantity	Days Manual Override*	Days Used	Hours Per Day	EquipConcat	On-Off	Earth Moving	Off Count	On Count	Earth Moving Count	On Type	CalEEModType	On Distance	Trips Per Day	VMT	Total VMT	Total Trips per day	Automobile?	Exempt
173	22	S-22	Site & ROW Restoration (overhead)	Excavator	0	250	Diesel	0		127	0	Excavator_250	off		113				Excavators							
174	22	S-22	Site & ROW Restoration (overhead)	D6 Type Dozer	1	250	Diesel	1		127	6	D6 Type Dozer_250	off	bulldozing	114		5		Crawler Tractors							
175	22	S-22	Site & ROW Restoration (overhead)	Motor Grader	1	250	Diesel	1		127	6	Motor Grader_250	off	grading	115		6		Graders							
176	22	S-22	Site & ROW Restoration (overhead)	Grader	0	250	Diesel	0		127	0	Grader_250	off	grading	116		7		Graders							
177	22	S-22	Site & ROW Restoration (overhead)	Haul Truck	1	425	Diesel	1		127	10	Haul Truck_425	on			57		hhdt		25	2	50	6350	2	Const Vehicle	
178	22	S-22	Site & ROW Restoration (overhead)	Excavator - Mini	1	108	Diesel	1		127	6	Excavator - Mini_108	off		117				Excavators							
179	22	S-22	Site & ROW Restoration (overhead)	Boom Truck w/Hydraulic Pole Puller	0	150	Diesel	0		127	0	m Truck w/Hydraulic Pole Puller_	off		118				Cranes							
180	22	S-22	Site & ROW Restoration (overhead)	Water Truck	1	300	Diesel	1		127	6	Water Truck_300	on			58		hhdt		25	2	50	6350	2	Const Vehicle	
181	22	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	2	425	Diesel	1		127	6	Hydroseed truck_425	on			59		vendor		25	2	50	6350	2	Const Vehicle	
182	22	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	2	410	Diesel	1		127	3	Pickup - 1 Ton_410	on			60		passenger		25	2	50	6350	2	Automobile	Yes
183	23	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	2	395	Gasoline	4		98	2	Pickup - 1/2 ton_395	on			61		passenger		25	2	200	19600	8	Automobile	Yes
184	23	S-23	Site & ROW Restoration (underground)	Dump Truck	0	415	Diesel	0		98	0	Dump Truck_415	on			62		hhdt		25	2	0	0	0	Const Vehicle	
185	23	S-23	Site & ROW Restoration (underground)	Skid steer loader	1	74	Diesel	1		98	6	Skid steer loader_74	off		119				Skid Steer Loaders							
186	23	S-23	Site & ROW Restoration (underground)	Water Truck	1	300	Diesel	2		98	6	Water Truck_300	on			63		hhdt		25	2	100	9800	4	Const Vehicle	
187	23	S-23	Site & ROW Restoration (underground)	Excavator	0	250	Diesel	0		98	0	Excavator_250	off		120				Excavators							
188	23	S-23	Site & ROW Restoration (underground)	D6 Type Dozer	0	250	Diesel	0		98	0	D6 Type Dozer_250	off	bulldozing	121		8		Crawler Tractors							
189	23	S-23	Site & ROW Restoration (underground)	Motor Grader	0	250	Diesel	0		98	0	Motor Grader_250	off	grading	122		9		Graders							
190	23	S-23	Site & ROW Restoration (underground)	Grader	0	250	Diesel	0		98	0	Grader_250	off	grading	123		10		Graders							
191	23	S-23	Site & ROW Restoration (underground)	Haul Truck	1	425	Diesel	1		98	10	Haul Truck_425	on			64		hhdt		25	2	50	4900	2	Const Vehicle	
192	23	S-23	Site & ROW Restoration (underground)	Excavator - Mini	1	108	Diesel	1		98	6	Excavator - Mini_108	off		124				Excavators							
193	23	S-23	Site & ROW Restoration (underground)	Boom Truck w/Hydraulic Pole Puller	2	150	Diesel	1		98	6	m Truck w/Hydraulic Pole Puller_	off		125				Cranes							
194	23	S-23	Site & ROW Restoration (underground)	Water Truck	1	300	Diesel	1		98	6	Water Truck_300	on			65		hhdt		25	2	50	4900	2	Const Vehicle	
195	23	S-23	Site & ROW Restoration (underground)	Hydroseed truck	2	425	Diesel	1		98	6	Hydroseed truck_425	on			66		vendor		25	2	50	4900	2	Const Vehicle	
196	23	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	2	410	Diesel	1		98	3	Pickup - 1 Ton_410	on			67		passenger		25	2	50	4900	2	Automobile	Yes
197	1	S-01	Survey and Staking	Worker Commute	0	NA	Gasoline	5		1052	NA	Worker Commute_NA	on			68		passenger		40	2	400	420800	10	Automobile	
198	2	S-02	Utility Locates	Worker Commute	0	NA	Gasoline	5		1052	NA	Worker Commute_NA	on			69		passenger		40	2	400	420800	10	Automobile	
199	3	S-03	Mobilization	Worker Commute	0	NA	Gasoline	11		47	NA	Worker Commute_NA	on			70		passenger		40	2	880	41360	22	Automobile	
200	4	S-04	Access Road Construction	Worker Commute	0	NA	Gasoline	11		203	NA	Worker Commute_NA	on			71		passenger		40	2	880	178640	22	Automobile	
201	5	S-05	Conventional Structure Foundation Installation	Worker Commute	0	NA	Gasoline	19		303	NA	Worker Commute_NA	on			72		passenger		40	2	1520	460560	38	Automobile	
202	6	S-06	Conventional Structure Installation	Worker Commute	0	NA	Gasoline	12		252	NA	Worker Commute_NA	on			73		passenger		40	2	960	241920	24	Automobile	
203	7	S-07	Helicopter Support	Worker Commute	0	NA	Gasoline	14		239	NA	Worker Commute_NA	on			74		passenger		40	2	1120	267680	28	Automobile	
204	8	S-08	Helicopter Landing Pad Construction	Worker Commute	0	NA	Gasoline	5		203	NA	Worker Commute_NA	on			75		passenger		40	2	400	81200	10	Automobile	
205	9	S-09	Helicopter Landing Platform Construction	Worker Commute	0	NA	Gasoline	5		203	NA	Worker Commute_NA	on			76		passenger		40	2	400	81200	10	Automobile	
206	10	S-10	Helicopter Site Preparation	Worker Commute	0	NA	Gasoline	5		203	NA	Worker Commute_NA	on			77		passenger		40	2	400	81200	10	Automobile	
207	11	S-11	Helicopter Structure Foundation Installation	Worker Commute	0	NA	Gasoline	5		216	NA	Worker Commute_NA	on			78		passenger		40	2	400	86400	10	Automobile	
208	12	S-12	Helicopter Structure Installation	Worker Commute	0	NA	Gasoline	5		164	NA	Worker Commute_NA	on			79		passenger		40	2	400	65600	10	Automobile	
209	13	S-13	Conductor Installation	Worker Commute	0	NA	Gasoline	16		76	NA	Worker Commute_NA	on			80		passenger		40	2	1280	97280	32	Automobile	
210	14	S-14	Excavate Trench	Worker Commute	0	NA	Gasoline	9		201	NA	Worker Commute_NA	on			81		passenger		40	2	720	144720	18	Automobile	
211	15	S-15	Duct Bank & Conduit Installation	Worker Commute	0	NA	Gasoline	7		199	NA	Worker Commute_NA	on			82		passenger		40	2	560	111440	14	Automobile	
212	16	S-16	Cable Installation	Worker Commute	0	NA	Gasoline	6		227	NA	Worker Commute_NA	on			83		passenger		40	2	480	108960	12	Automobile	
213	17	S-17	Paving	Worker Commute	0	NA	Gasoline	8		201	NA	Worker Commute_NA	on			84		passenger		40	2	640	128640	16	Automobile	
214	18	S-18	Site Preparation	Worker Commute	0	NA	Gasoline	8		78	NA	Worker Commute_NA	on			85		passenger		40	2	640	49920	16	Automobile	
215	19	S-19	Below-Grade Construction	Worker Commute	0	NA	Gasoline	21		300	NA	Worker Commute_NA	on			86		passenger		40	2	1680	504000	42	Automobile	
216	20	S-20	Above-Grade Construction	Worker Commute	0	NA	Gasoline	22		903	NA	Worker Commute_NA	on			87		passenger		40	2	1760	1589280	44	Automobile	
217	21	S-21	Commissioning and Testing	Worker Commute	0	NA	Gasoline	7		253	NA	Worker Commute_NA	on			88		passenger		40	2	560	141680	14	Automobile	
218	22	S-22	Site & ROW Restoration (overhead)	Worker Commute	0	NA	Gasoline	10		127	NA	Worker Commute_NA	on			89		passenger		40	2	800	101600	20	Automobile	
219	23	S-23	Site & ROW Restoration (underground)	Worker Commute	0	NA	Gasoline	9		98	NA	Worker Commute_NA	on			90		passenger		40	2	720	70560	18	Automobile	

Table 16: On-Road Vehicle Distance Assumptions

Component	Equipment	Concat	On-Off	Fuel	On Type	Trip Distance	Paved Percent	Paved Distance	Unpaved Distance	Trips per day
S	Concrete Truck_425	S_Concrete Truck_425	on	Diesel	hhdt	20	98	19.6	0.4	2
S	Dump Truck_415	S_Dump Truck_415	on	Diesel	hhdt	25	98	24.5	0.5	2
S	Flatbed Truck_350	S_Flatbed Truck_350	on	Diesel	hhdt	20	98	19.6	0.4	2
S	Foreman Truck_300	S_Foreman Truck_300	on	Diesel	passenger	20	99	19.8	0.2	2
S	Gang Truck_350	S_Gang Truck_350	on	Diesel	passenger	25	98	24.5	0.5	2
S	Haul Truck_425	S_Haul Truck_425	on	Diesel	hhdt	25	98	24.5	0.5	2
S	Hydroseed Truck_425	S_Hydroseed Truck_425	on	Diesel	vendor	25	98	24.5	0.5	2
S	Jet Fuel Truck_300	S_Jet Fuel Truck_300	on	Diesel	vendor	20	98	19.6	0.4	2
S	Pickup - 1 Ton_410	S_Pickup - 1 Ton_410	on	Diesel	passenger	25	98	24.5	0.5	2
S	Pickup - 1/2 Ton_395	S_Pickup - 1/2 Ton_395	on	Gasoline	passenger	25	98	24.5	0.5	2
S	Tool - Van/Conex 20'_0	S_Tool - Van/Conex 20'_0	on	Diesel	passenger	25	98	24.5	0.5	2
S	Water Truck_300	S_Water Truck_300	on	Diesel	hhdt	25	98	24.5	0.5	2
S	Welding Truck_250	S_Welding Truck_250	on	Diesel	passenger	25	98	24.5	0.5	2
S	Worker Commute_NA	S_Worker Commute_NA	on	Gasoline	passenger	40	99	39.6	0.4	2

Table 17: Off-Road Uncontrolled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	CalEEModType	HP	LF	CalEEMod Bin	Tier Bin	Year	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-02	Utility Locates	Air Compressor 340/390hp	Diesel	1	8	Air Compressors	390	0.48	2	6	2027	1.593004	11.68118	15.81629	0.024257	0.267711	0.246294	1876.393	0.076115	0.015223
2	S-02	Utility Locates	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
3	S-03	Mobilization	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
4	S-03	Mobilization	Boom truck	Diesel	1	3	Cranes	150	0.29	5	4	2027	0.086568	0.771086	0.952542	0.001404	0.041034	0.037752	152.1381	0.006171	0.001234
5	S-03	Mobilization	Forklift	Diesel	2	8	Forklifts	100	0.2	5	3	2027	0.125761	0.882577	2.229573	0.003437	0.043097	0.039649	372.0844	0.015093	0.003019
6	S-03	Mobilization	Generator 150-260 kW	Diesel	1	10	Generator Sets	260	0.74	2	5	2027	1.330064	13.93677	15.70927	0.031164	0.278511	0.25623	2410.692	0.097788	0.019558
7	S-03	Mobilization	Light plant	Diesel	4	2	Other Construction Equipment	10	0.42	1	1	2027	0.060849	0.461861	0.361041	0.000945	0.017899	0.016467	62.83666	0.002549	0.00051
8	S-03	Mobilization	Water holding tanks	Diesel	2	10	Other Construction Equipment	0	0.42	1	1	2027	0	0	0	0	0	0	0	0	0
9	S-04	Access Road Construction	Motor Grader	Diesel	2	6	Graders	250	0.41	6	5	2027	0.551967	4.975387	3.200261	0.013223	0.169615	0.156046	1431.701	0.058076	0.011615
10	S-04	Access Road Construction	Skid steer loader	Diesel	1	4	Skid Steer Loaders	74	0.37	3	2	2027	0.031262	0.423263	0.78312	0.001179	0.011262	0.010361	127.6438	0.005178	0.001036
11	S-04	Access Road Construction	D6 Type Dozer	Diesel	1	6	Crawler Tractors	250	0.43	6	5	2027	0.318298	3.11205	1.986865	0.006921	0.126263	0.116162	749.4217	0.0304	0.00608
12	S-04	Access Road Construction	Excavator	Diesel	2	4	Excavators	250	0.38	6	5	2027	0.211596	1.389214	1.839204	0.008177	0.04767	0.043856	884.9445	0.035897	0.007179
13	S-04	Access Road Construction	Vibratory Roller	Diesel	1	4	Rollers	125	0.38	5	4	2027	0.04709	0.366772	1.222124	0.002041	0.015944	0.014668	220.9149	0.008961	0.001792
14	S-04	Access Road Construction	Bulldozer	Diesel	1	6	Crawler Tractors	250	0.43	6	5	2027	0.318298	3.11205	1.986865	0.006921	0.126263	0.116162	749.4217	0.0304	0.00608
15	S-04	Access Road Construction	Road Grader	Diesel	1	6	Graders	250	0.41	6	5	2027	0.275983	2.487694	1.600131	0.006612	0.084808	0.078023	715.8504	0.029038	0.005808
16	S-04	Access Road Construction	Loader	Diesel	1	2	Tractors/Loaders/Backhoes	230	0.37	6	5	2027	0.058405	0.443261	0.448378	0.001828	0.017544	0.01614	197.8446	0.008025	0.001605
17	S-04	Access Road Construction	Mower	Diesel	1	3	Tractors/Loaders/Backhoes	48	0.37	2	1	2027	0.061616	0.417922	0.539002	0.000628	0.014382	0.013231	68.06881	0.002761	0.000552
18	S-05	Conventional Structure Foundation Installation	Compressor	Diesel	1	6	Air Compressors	24	0.48	1	1	2027	0.087372	0.663658	0.394478	0.001152	0.026332	0.024226	86.81266	0.003522	0.000704
19	S-05	Conventional Structure Foundation Installation	Boom truck	Diesel	1	3	Cranes	150	0.29	5	4	2027	0.086568	0.771086	0.952542	0.001404	0.041034	0.037752	152.1381	0.006171	0.001234
20	S-05	Conventional Structure Foundation Installation	Pressure Digger - Lo-Drill (Tr	Diesel	1	8	Bore/Drill Rigs	275	0.5	6	5	2027	0.277748	2.493142	2.569932	0.011774	0.083079	0.076432	1274.183	0.051686	0.010337
21	S-05	Conventional Structure Foundation Installation	Skid steer loader	Diesel	1	6	Skid Steer Loaders	74	0.37	3	2	2027	0.046893	0.634894	1.17468	0.001769	0.016894	0.015542	191.4657	0.007767	0.001553
22	S-05	Conventional Structure Foundation Installation	Forklift - 10 K Reach	Diesel	2	2	Rough Terrain Forklifts	130	0.4	5	4	2027	0.071232	0.515178	1.338697	0.002236	0.037352	0.034364	242.0558	0.009819	0.001964
23	S-05	Conventional Structure Foundation Installation	Crane - 35 Ton (Manlift)	Diesel	2	5	Cranes	250	0.29	6	5	2027	0.373486	3.597977	2.311288	0.007787	0.150203	0.138187	843.2253	0.034205	0.006841
24	S-05	Conventional Structure Foundation Installation	844 Loader	Diesel	1	6	Rubber Tired Loaders	417	0.36	7	6	2027	0.372735	2.389747	2.475095	0.009678	0.090991	0.083712	1047.792	0.042503	0.008501
25	S-05	Conventional Structure Foundation Installation	Rough Terrain Crane	Diesel	1	6	Cranes	185	0.29	6	5	2027	0.165828	1.597502	1.026212	0.003457	0.06669	0.061355	374.392	0.015187	0.003037
26	S-06	Conventional Structure Installation	Crane - 35 Ton (Manlift)	Diesel	2	2	Cranes	250	0.29	6	5	2027	0.149394	1.439191	0.924515	0.003115	0.060081	0.055275	337.2901	0.013682	0.002736
27	S-06	Conventional Structure Installation	Forklift - 15 K Reach	Diesel	1	1	Rough Terrain Forklifts	130	0.4	5	4	2027	0.017808	0.128794	0.334674	0.000559	0.009338	0.008591	60.51394	0.002455	0.000491
28	S-06	Conventional Structure Installation	Crane - 200 Ton	Diesel	1	4	Cranes	275	0.29	6	5	2027	0.164334	1.58311	1.016967	0.003426	0.066089	0.060802	371.0191	0.01505	0.00301
29	S-06	Conventional Structure Installation	844 Loader	Diesel	1	6	Rubber Tired Loaders	417	0.36	7	6	2027	0.372735	2.389747	2.475095	0.009678	0.090991	0.083712	1047.792	0.042503	0.008501
30	S-10	Helicopter Site Preparation	Mower/Veg Clearing Equipm	Diesel	2	3	Other General Industrial Equipment	50	0.34	3	2	2027	0.045924	0.442647	0.805525	0.001098	0.015393	0.014161	118.8306	0.00482	0.000964
31	S-10	Helicopter Site Preparation	Chipper	Diesel	1	3	Other General Industrial Equipment	50	0.34	3	2	2027	0.022962	0.221324	0.402762	0.000549	0.007696	0.007081	59.41531	0.00241	0.000482
32	S-10	Helicopter Site Preparation	Jackhammer	Diesel	1	2	Other Construction Equipment	0	0.42	1	1	2027	0	0	0	0	0	0	0	0	0
33	S-08	Helicopter Landing Pad Construction	Air Compressor 340/390hp	Diesel	1	4	Air Compressors	390	0.48	2	6	2027	0.796502	5.840589	7.908143	0.012129	0.133855	0.123147	938.1965	0.038057	0.007611
34	S-08	Helicopter Landing Pad Construction	Skid steer loader	Diesel	1	4	Skid Steer Loaders	74	0.37	3	2	2027	0.031262	0.423263	0.78312	0.001179	0.011262	0.010361	127.6438	0.005178	0.001036
35	S-08	Helicopter Landing Pad Construction	Excavator - Mini	Diesel	1	4	Excavators	108	0.38	5	3	2027	0.051425	0.334381	1.113839	0.001765	0.01614	0.014849	191.0897	0.007751	0.00155
36	S-08	Helicopter Landing Pad Construction	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
37	S-08	Helicopter Landing Pad Construction	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
38	S-08	Helicopter Landing Pad Construction	Vibrating Plate	Diesel	1	4	Plate Compactors	14	0.43	1	1	2027	0.029025	0.219935	0.184218	0.000469	0.008594	0.007907	30.17042	0.001224	0.000245
39	S-09	Helicopter Landing Platform Construction	Air Compressor 340/390hp	Diesel	1	4	Air Compressors	390	0.48	2	6	2027	0.796502	5.840589	7.908143	0.012129	0.133855	0.123147	938.1965	0.038057	0.007611
40	S-09	Helicopter Landing Platform Construction	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
41	S-09	Helicopter Landing Platform Construction	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
42	S-09	Helicopter Landing Platform Construction	Generator 25 kW	Diesel	1	2	Generator Sets	36	0.74	2	1	2027	0.036833	0.385941	0.435026	0.000863	0.007713	0.007096	66.75763	0.002708	0.000542
43	S-09	Helicopter Landing Platform Construction	Testing Jack (5 hp pump)	Diesel	1	2	Pumps	5	0.74	1	1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
44	S-09	Helicopter Landing Platform Construction	Micropile Drill Power Unit	Diesel	1	8	Bore/Drill Rigs	310	0.5	7	6	2027	0.267199	1.987894	2.681605	0.013159	0.071308	0.065604	1423.958	0.057762	0.011552
45	S-09	Helicopter Landing Platform Construction	Refueler (small fuel transfer	Diesel	1	1	Other Construction Equipment	0	0.42	1	1	2027	0	0	0	0	0	0	0	0	0
46	S-09	Helicopter Landing Platform Construction	Grout Plant	Diesel	1	8	Cement and Mortar Mixers	20	0.56	1	1	2027	0.109194	0.829199	0.643071	0.001688	0.032221	0.029643	112.6577	0.00457	0.000914
47	S-11	Helicopter Structure Foundation Installation	Air Compressor 340/390hp	Diesel	1	4	Air Compressors	390	0.48	2	6	2027	0.796502	5.840589	7.908143	0.012129	0.133855	0.123147	938.1965	0.038057	0.007611
48	S-11	Helicopter Structure Foundation Installation	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
49	S-11	Helicopter Structure Foundation Installation	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
50	S-11	Helicopter Structure Foundation Installation	Generator 25 kW	Diesel	1	2	Generator Sets	36	0.74	2	1	2027	0.036833	0.385941	0.435026	0.000863	0.007713	0.007096	66.75763	0.002708	0.000542
51	S-11	Helicopter Structure Foundation Installation	Testing Jack (5 hp pump)	Diesel	1	2	Pumps	5	0.74	1	1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
52	S-11	Helicopter Structure Foundation Installation	Micropile Drill Power Unit	Diesel	1	8	Bore/Drill Rigs	310	0.5	7	6	2027	0.267199	1.987894	2.681605	0.013159	0.071308	0.065604	1423.958	0.057762	0.011552
53	S-11	Helicopter Structure Foundation Installation	Refueler (small fuel transfer	Diesel	1	1	Other Construction Equipment	0	0.42	1	1	2027	0	0	0	0	0	0	0	0	0
54	S-11	Helicopter Structure Foundation Installation	Grout Plant	Diesel	1	8	Cement and Mortar Mixers	20	0.56	1	1	2027	0.109194	0.829199	0.643071	0.001688	0.032221	0.029643	112.6577	0.00457	0.000914
55	S-12	Helicopter Structure Installation	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
56	S-12	Helicopter Structure Installation	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
57	S-12	Helicopter Structure Installation	Generator 25 kW	Diesel	1	2	Generator Sets	36	0.74	2	1	2027	0.036833	0.385941	0.435026	0.000863	0.007713	0.007096	66.75763	0.002708	0.000542
58	S-13	Conductor Installation	Crane - 35 Ton (Manlift)	Diesel	3	5	Cranes	250	0.29	6	5	2027	0.560229	5.396965	3.466932	0.01168	0.225305	0.207281	1264.838	0.051307	0.010261
59	S-13	Conductor Installation	D8 Sag Dozer	Diesel	3	10	Crawler Tractors	200	0.43	6	5	2027	1.273194	12.4482	7.94746	0.027684	0.505052	0.464648	2997.687	0.121599	0.02432
60	S-13	Conductor Installation	Wire Puller	Diesel	1	5	Other Construction Equipment	250	0.42	6	5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
61	S-13	Conductor Installation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	250	0.42	6	5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
62	S-13	Conductor Installation	Wire Puller	Diesel	0	3	Other Construction Equipment	250	0.42	6	5	2027	0	0	0	0	0	0	0	0	0
63	S-13	Conductor Installation	Boom Truck w/Hydraulic Po	Diesel	1	1	Cranes	150	0.29	5	4	2027	0.028856	0.257029	0.317514	0.000468	0.013678	0.012584	50.71269	0.002057	0.000411
64	S-13	Conductor Installation	Hydraulic Pole Puller	Diesel	1	1	Cranes	150	0.29	5	4	2027	0.028856	0.257029	0.317514	0.000468	0.013678	0.012584	50.71269	0.002057	0.000411
65	S-14	Excavate Trench	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
66	S-14	Excavate Trench	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
67	S-14	Excavate Trench	Air Compressor 340/390hp	Diesel	1	8	Air Compressors	390	0.48	2	6	2027	1.593004	11.68118	15.81629	0.024257	0.267711	0.246294	1876.393	0.076115	0.015223
68	S-14	Excavate Trench	Concrete Saw	Diesel	1	2	Concrete/Industrial Saws	13	0.73	1	1	2027	0.024676	0.18868	0.10191	0.000314	0.00705	0.006486	24.75025	0.001004	0.000201
69	S-14	Excavate Trench	Loader	Diesel	1	6	Tractors/Loaders/Backhoes	230	0.37	6	5	2027	0.175214	1.329784	1.345133	0.005483	0.052632	0.048421	593.5337	0.024076	0.004815
70	S-14	Excavate Trench	Trackhoe	Diesel	4	4	Excavators	250	0.38	6	5	2027	0.423191	2.778428	3.678408	0.016353	0.095339	0.087712	1769.889	0.071794	0.014359
71	S-14	Excavate Trench	Trencher	Diesel	2	5	Trenchers	75	0.5	4	3	2027	0.30107	2.897835	2.970015	0.004031	0.178091	0.163844	436.8367	0.01772	0.003544
72	S-14	Excavate Trench	Light plant	Diesel	4	10	Other Construction Equipment	10	0.42	1	1	2027	0.304244	2.309304	1.805207	0.004725	0.089495	0.082335	314.1833	0.012745	0.002549
73	S-15	Duct Bank & Conduit Installation	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
74	S-15	Duct Bank & Conduit Installation	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
75	S-15	Duct Bank & Conduit Installation	Air Compressor 340/390hp	Diesel	1	8	Air Compressors	390	0.48	2	6	2027	1.593004	11.68118	15.81629	0.024257	0.267711	0.246294	1876.393	0.076115	0.015223
76	S-15	Duct Bank & Conduit Installation	Loader	Diesel	1	6	Tractors/Loaders/Backhoes	230	0.37	6	5	2027	0.175214	1.329784	1.345133	0.005483	0.052632	0.048421	593.5337	0.024076	0.004815
77	S-15	Duct Bank & Conduit Installation	Trackhoe	Diesel	4	4	Excavators	250	0.38	6	5	2027	0.423191	2.778428	3.678408	0.016353	0.095339	0.087712	1769.889	0.071794	0.014359
78	S-15	Duct Bank & Conduit Installation	Trencher	Diesel	2	5	Trenchers	75	0.5	4	3	2027	0.30107	2.897835	2.970015	0.004031	0.178091	0.163844	436.8367	0.01772	0.003544
79	S-16	Cable Installation	Cable Reel	Diesel	1	5	Other Construction Equipment	175	0.42	6	5	2027	0.156867	1.455644	1.083179	0.003963	0.060087	0.05528	429.0101	0.017403	0.003481
80	S-16	Cable Installation	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
81	S-16	Cable Installation	Pulling Rig	Diesel	1	5	Other Construction Equipment	175	0.42	6	5	2027	0.156867	1.455644	1.083179	0.003963	0.060087	0.05528	429.0101	0.017403	0.003481
82	S-17	Paving	Grinder	Diesel	1	3	Other Construction Equipment	15	0.42	1	1	2027	0.034227	0.259797	0.203086	0.000532	0.010068	0.009263	35.34562	0.001434	0.000287
83	S-17	Paving	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
84	S-17	Paving	Bitumen (emulsion) sprayer	Diesel	1	1	Other Construction Equipment	5	0.42	1	1	2027	0.003803	0.028866	0.022565	5.91E-05	0.001119	0.001029	3.927291	0.000159	3.19E-05
85	S-17	Paving	A/C Roller 5-7 Ton	Diesel	1	8	Rollers	74	0.38	3	2	2027	0.944979	7.550686	3.086187	0.002396	0.544848	0.50126	261.6373	0.010613	0.002123
86	S-17	Paving	Backhoe	Diesel	1	6	Tractors/Loaders/Backhoes	150	0.37	5	4	2027	0.110476	0.715101	2.279898	0.003567	0.034845	0.032057	386.1082	0.015662	0.003132
87	S-18	Site Preparation	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
88	S-18	Site Preparation	Boom truck	Diesel	1	1	Cranes	150	0.29	5	4	2027	0.028856	0.257029	0.317514	0.000468	0.013678	0.012584	50.71269	0.002057	0.000411
89	S-18	Site Preparation	Forklift	Diesel	1	8	Forklifts	100	0.2	5	3	2027	0.06288	0.441288	1.114787	0.001718	0.021548	0.019825	186.0422	0.007547	0.001509
90	S-18	Site Preparation	Loader	Diesel	1	2	Tractors/Loaders/Backhoes	230	0.37	6	5	2027	0.058405	0.443261	0.448378	0.001828	0.017544	0.01614	197.8446	0.008025	0.001605
91	S-19	Below-Grade Construction	Excavator	Diesel	2	8	Excavators	250	0.38	6	5	2027	0.423191	2.778428	3.678408	0.016353	0.095339	0.087712	1769.889	0.071794	0.014359
92	S-19	Below-Grade Construction	Forklift - 15 K Reach	Diesel	1	0	Rough Terrain Forklifts	130	0.4	5	4	2027	0	0	0	0	0	0	0	0	0
93	S-19	Below-Grade Construction	Backhoe - 2X4	Diesel	2	6	Tractors/Loaders/Backhoes	68	0.37	3	2	2027	1.035743	8.102871	3.465433	0.003225	0.666964	0.613607	351.646	0.014264	0.002853
94	S-19	Below-Grade Construction	Excavator - Mini	Diesel	1	8	Excavators	108	0.38	5	3	2027	0.10285	0.668762	2.227678	0.003531	0.032279	0.029697	382.1794	0.015503	0.003101
95	S-19	Below-Grade Construction	Generator 25 kW	Diesel	1	8	Generator Sets	36	0.74	2	1	2027	0.14733	1.543766	1.740104	0.003452	0.03085	0.028382	267.0305	0.010832	0.002166
96	S-19	Below-Grade Construction	Loader	Diesel	2	8	Tractors/Loaders/Backhoes	230	0.37	6	5	2027	0.467237	3.54609	3.58702	0.014622	0.140351	0.129123	1582.757	0.064204	0.012841
97	S-19	Below-Grade Construction	Pressure Digger - Lo-Drill (Tr	Diesel	1	5	Bore/Drill Rigs	275	0.5	6	5	2027	0.173593	1.558214	1.606208	0.007358	0.051924	0.04777	796.3646	0.032304	0.006461
98	S-19	Below-Grade Construction	Trencher	Diesel	2	5	Trenchers	75	0.5	4	3	2027	0.30107	2.897835	2.970015	0.004031	0.178091	0.163844	436.8367	0.01772	0.003544
99	S-19	Below-Grade Construction	Skid steer loader	Diesel	2	8	Skid Steer Loaders	74	0.37	3	2	2027	0.125048	1.693051	3.132479	0.004717	0.045049	0.041446	510.5751	0.020711	0.004142
100	S-19	Below-Grade Construction	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	250	0.42	6	5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
101	S-19	Below-Grade Construction	Wire Puller	Diesel	1	3	Other Construction Equipment	250	0.42	6	5	2027	0.134457	1.247695	0.928439	0.003396	0.051503	0.047383	367.7229	0.014916	0.002983
102	S-20	Above-Grade Construction	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	250	0.42	6	5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
103	S-20	Above-Grade Construction	Wire Puller	Diesel	1	3	Other Construction Equipment	250	0.42	6	5	2027	0.134457	1.247695	0.928439	0.003396	0.051503	0.047383	367.7229	0.014916	0.002983
104	S-20	Above-Grade Construction	Generator 25 kW	Diesel	2	8	Generator Sets	36	0.74	2	1	2027	0.29466	3.087531	3.480207	0.006904	0.061701	0.056765	534.061	0.021664	0.004333
105	S-20	Above-Grade Construction	Crane - 35 Ton (Manlift)	Diesel	2	5	Cranes	250	0.29	6	5	2027	0.373486	3.597977	2.311288	0.007787	0.150203	0.138187	843.2253	0.034205	0.006841

Table 18: Off-Road Uncontrolled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-02	1052	0.83792	6.144299	8.319366	0.012759223	0.140816	0.129551	986.9827	0.040036	0.008007267
2	S-02	1052	0.116221	0.752287	2.398453	0.003752508	0.036657	0.033724	406.1858	0.016477	0.003295335
3	S-03	47	0.005192	0.03361	0.107155	0.00016765	0.001638	0.001507	18.14708	0.000736	0.000147225
4	S-03	47	0.002034	0.018121	0.022385	3.30045E-05	0.000964	0.000887	3.575245	0.000145	2.90055E-05
5	S-03	47	0.002955	0.020741	0.052395	8.07692E-05	0.001013	0.000932	8.743983	0.000355	7.09388E-05
6	S-03	47	0.031256	0.327514	0.369168	0.000732359	0.006545	0.006021	56.65127	0.002298	0.000459605
7	S-03	47	0.00143	0.010854	0.008484	2.22096E-05	0.000421	0.000387	1.476661	5.99E-05	1.198E-05
8	S-03	47	0	0	0	0	0	0	0	0	0
9	S-04	203	0.056025	0.505002	0.324827	0.001342145	0.017216	0.015839	145.3176	0.005895	0.001178944
10	S-04	203	0.003173	0.042961	0.079487	0.000119705	0.001143	0.001052	12.95584	0.000526	0.000105109
11	S-04	203	0.032307	0.315873	0.201667	0.00070247	0.012816	0.01179	76.0663	0.003086	0.000617116
12	S-04	203	0.021477	0.141005	0.186679	0.000829915	0.004838	0.004451	89.82186	0.003644	0.000728714
13	S-04	203	0.00478	0.037227	0.124046	0.000207192	0.001618	0.001489	22.42286	0.00091	0.000181914
14	S-04	203	0.032307	0.315873	0.201667	0.00070247	0.012816	0.01179	76.0663	0.003086	0.000617116
15	S-04	203	0.028012	0.252501	0.162413	0.000671072	0.008608	0.007919	72.65882	0.002947	0.000589472
16	S-04	203	0.005928	0.044991	0.04551	0.000185514	0.001781	0.001638	20.08122	0.000815	0.000162916
17	S-04	203	0.006254	0.042419	0.054709	6.37219E-05	0.00146	0.001343	6.908984	0.00028	5.60517E-05
18	S-05	303	0.013237	0.100544	0.059763	0.000174491	0.003989	0.00367	13.15212	0.000534	0.000106701
19	S-05	303	0.013115	0.11682	0.14431	0.000212774	0.006217	0.005719	23.04892	0.000935	0.000186993
20	S-05	303	0.042079	0.377711	0.389345	0.001783696	0.012586	0.01158	193.0388	0.00783	0.001566099
21	S-05	303	0.007104	0.096186	0.177964	0.000268008	0.002559	0.002355	29.00705	0.001177	0.000235331
22	S-05	303	0.010792	0.078049	0.202813	0.000338778	0.005659	0.005206	36.67145	0.001488	0.000297511
23	S-05	303	0.056583	0.545094	0.35016	0.001179697	0.022756	0.020935	127.7486	0.005182	0.001036409
24	S-05	303	0.056469	0.362047	0.374977	0.001466235	0.013785	0.012682	158.7406	0.006439	0.001287842
25	S-05	303	0.025123	0.242022	0.155471	0.000523785	0.010104	0.009295	56.72039	0.002301	0.000460165
26	S-06	252	0.018824	0.181338	0.116489	0.000392454	0.00757	0.006965	42.49856	0.001724	0.000344785
27	S-06	252	0.002244	0.016228	0.042169	7.0439E-05	0.001177	0.001082	7.624757	0.000309	6.18587E-05
28	S-06	252	0.020706	0.199472	0.128138	0.000431699	0.008327	0.007661	46.74841	0.001896	0.000379264
29	S-06	252	0.046965	0.301108	0.311862	0.001219443	0.011465	0.010548	132.0218	0.005355	0.001071077
30	S-10	203	0.004661	0.044929	0.081761	0.000111397	0.001562	0.001437	12.06131	0.000489	9.78519E-05
31	S-10	203	0.002331	0.022464	0.04088	5.56986E-05	0.000781	0.000719	6.030654	0.000245	4.89259E-05
32	S-10	203	0	0	0	0	0	0	0	0	0
33	S-08	203	0.080845	0.59282	0.802676	0.001231047	0.013586	0.012499	95.22694	0.003863	0.000772564
34	S-08	203	0.003173	0.042961	0.079487	0.000119705	0.001143	0.001052	12.95584	0.000526	0.000105109
35	S-08	203	0.00522	0.03394	0.113055	0.000179193	0.001638	0.001507	19.3956	0.000787	0.000157354
36	S-08	203	0.000468	0.00355	0.002472	6.72763E-06	0.000144	0.000132	0.470518	1.91E-05	3.81726E-06
37	S-08	203	0.000935	0.0071	0.004944	1.34553E-05	0.000287	0.000264	0.941037	3.82E-05	7.63451E-06
38	S-08	203	0.002946	0.022323	0.018698	4.76521E-05	0.000872	0.000803	3.062298	0.000124	2.4844E-05
39	S-09	203	0.080845	0.59282	0.802676	0.001231047	0.013586	0.012499	95.22694	0.003863	0.000772564
40	S-09	203	0.000468	0.00355	0.002472	6.72763E-06	0.000144	0.000132	0.470518	1.91E-05	3.81726E-06
41	S-09	203	0.000935	0.0071	0.004944	1.34553E-05	0.000287	0.000264	0.941037	3.82E-05	7.63451E-06
42	S-09	203	0.003739	0.039173	0.044155	8.75955E-05	0.000783	0.00072	6.775899	0.000275	5.4972E-05
43	S-09	203	0.000935	0.0071	0.004944	1.34553E-05	0.000287	0.000264	0.941037	3.82E-05	7.63451E-06
44	S-09	203	0.027121	0.201771	0.272183	0.001335595	0.007238	0.006659	144.5318	0.005863	0.001172568
45	S-09	203	0	0	0	0	0	0	0	0	0
46	S-09	203	0.011083	0.084164	0.065272	0.000171364	0.00327	0.003009	11.43475	0.000464	9.27687E-05
47	S-11	216	0.086022	0.630784	0.854079	0.001309882	0.014456	0.0133	101.3252	0.00411	0.000822039
48	S-11	216	0.000497	0.003777	0.00263	7.15847E-06	0.000153	0.000141	0.50065	2.03E-05	4.06171E-06
49	S-11	216	0.000995	0.007554	0.00526	1.43169E-05	0.000306	0.000281	1.0013	4.06E-05	8.12342E-06
50	S-11	216	0.003978	0.041682	0.046983	9.3205E-05	0.000833	0.000766	7.209824	0.000292	5.84924E-05
51	S-11	216	0.000995	0.007554	0.00526	1.43169E-05	0.000306	0.000281	1.0013	4.06E-05	8.12342E-06
52	S-11	216	0.028857	0.214693	0.289613	0.001421126	0.007701	0.007085	153.7875	0.006238	0.001247659
53	S-11	216	0	0	0	0	0	0	0	0	0
54	S-11	216	0.011793	0.089553	0.069452	0.000182338	0.00348	0.003201	12.16703	0.000494	9.87096E-05
55	S-12	164	0.000378	0.002868	0.001997	5.43513E-06	0.000116	0.000107	0.380123	1.54E-05	3.08389E-06
56	S-12	164	0.000755	0.005736	0.003994	1.08703E-05	0.000232	0.000214	0.760246	3.08E-05	6.16778E-06
57	S-12	164	0.00302	0.031647	0.035672	7.07668E-05	0.000632	0.000582	5.474126	0.000222	4.44109E-05
58	S-13	76	0.021289	0.205085	0.131743	0.000443846	0.008562	0.007877	48.06384	0.00195	0.000389936
59	S-13	76	0.048381	0.473032	0.302003	0.001051974	0.019192	0.017657	113.9121	0.004621	0.000924155
60	S-13	76	0.008516	0.079021	0.058801	0.000215108	0.003262	0.003001	23.28912	0.000945	0.000188942
61	S-13	76	0.008516	0.079021	0.058801	0.000215108	0.003262	0.003001	23.28912	0.000945	0.000188942
62	S-13	76	0	0	0	0	0	0	0	0	0
63	S-13	76	0.001097	0.009767	0.012066	1.77896E-05	0.00052	0.000478	1.927082	7.82E-05	1.56342E-05
64	S-13	76	0.001097	0.009767	0.012066	1.77896E-05	0.00052	0.000478	1.927082	7.82E-05	1.56342E-05
65	S-14	201	0.022206	0.143735	0.45826	0.000716972	0.007004	0.006443	77.60775	0.003148	0.000629622
66	S-14	201	0.015893	0.120427	0.10087	0.000257066	0.004706	0.004329	16.52	0.00067	0.000134025
67	S-14	201	0.160097	1.173958	1.589537	0.002437836	0.026905	0.024753	188.5775	0.00765	0.001529906
68	S-14	201	0.00248	0.018962	0.010242	3.15604E-05	0.000709	0.000652	2.487401	0.000101	2.018E-05
69	S-14	201	0.017609	0.133643	0.135186	0.000551059	0.005289	0.004866	59.65014	0.00242	0.000483934
70	S-14	201	0.042531	0.279232	0.36968	0.001643477	0.009582	0.008815	177.8738	0.007215	0.001443068
71	S-14	201	0.030258	0.291232	0.298486	0.000405146	0.017898	0.016466	43.90209	0.001781	0.000356172
72	S-14	201	0.030577	0.232085	0.181423	0.000474908	0.008994	0.008275	31.57542	0.001281	0.000256167
73	S-15	199	0.021985	0.142305	0.4537	0.000709837	0.006934	0.006379	76.83553	0.003117	0.000623357
74	S-15	199	0.015735	0.119228	0.099866	0.000254508	0.004659	0.004286	16.35562	0.000663	0.000132691
75	S-15	199	0.158504	1.162277	1.57372	0.002413579	0.026637	0.024506	186.7011	0.007573	0.001514683
76	S-15	199	0.017434	0.132313	0.133841	0.000545575	0.005237	0.004818	59.05661	0.002396	0.000479119
77	S-15	199	0.042108	0.276454	0.366002	0.001627124	0.009486	0.008727	176.1039	0.007144	0.001428709
78	S-15	199	0.029956	0.288335	0.295516	0.000401115	0.01772	0.016302	43.46525	0.001763	0.000352628
79	S-16	227	0.017804	0.165216	0.122941	0.000449746	0.00682	0.006274	48.69264	0.001975	0.000395037
80	S-16	227	0.017948	0.136004	0.113918	0.000290318	0.005314	0.004889	18.65692	0.000757	0.000151361
81	S-16	227	0.017804	0.165216	0.122941	0.000449746	0.00682	0.006274	48.69264	0.001975	0.000395037
82	S-17	201	0.00344	0.02611	0.02041	5.34272E-05	0.001012	0.000931	3.552235	0.000144	2.88188E-05
83	S-17	201	0.015893	0.120427	0.10087	0.000257066	0.004706	0.004329	16.52	0.00067	0.000134025
84	S-17	201	0.000382	0.002901	0.002268	5.93636E-06	0.000112	0.000103	0.394693	1.6E-05	3.20209E-06
85	S-17	201	0.09497	0.758844	0.310162	0.000240752	0.054757	0.050377	26.29455	0.001067	0.000213324
86	S-17	201	0.011103	0.071868	0.22913	0.000358486	0.003502	0.003222	38.80387	0.001574	0.000314811
87	S-18	78	0.008617	0.055778	0.177832	0.000278228	0.002718	0.0025	30.11644	0.001222	0.000244331
88	S-18	78	0.001125	0.010024	0.012383	1.82578E-05	0.000533	0.000491	1.977795	8.02E-05	1.60456E-05
89	S-18	78	0.002452	0.01721	0.043477	6.70212E-05	0.00084	0.000773	7.255646	0.000294	5.88641E-05
90	S-18	78	0.002278	0.017287	0.017487	7.12812E-05	0.000684	0.000629	7.715938	0.000313	6.25984E-05
91	S-19	300	0.063479	0.416764	0.551761	0.002452951	0.014301	0.013157	265.4833	0.010769	0.002153833
92	S-19	300	0	0	0	0	0	0	0	0	0
93	S-19	300	0.155361	1.215431	0.519815	0.000483819	0.100045	0.092041	52.7469	0.00214	0.000427929
94	S-19	300	0.015428	0.100314	0.334152	0.000529633	0.004842	0.004455	57.32691	0.002325	0.000465086
95	S-19	300	0.0221	0.231565	0.261016	0.000517806	0.004628	0.004257	40.05458	0.001625	0.000324958
96	S-19	300	0.070086	0.531914	0.538053	0.002193268	0.021053	0.019368	237.4135	0.009631	0.001926106
97	S-19	300	0.026039	0.233732	0.240931	0.001103772	0.007789	0.007166	119.4547	0.004846	0.000969121
98	S-19	300	0.045161	0.434675	0.445502	0.000604696	0.026714	0.024577	65.52551	0.002658	0.0005316
99	S-19	300	0.018757	0.253958	0.469872	0.000707613	0.006757	0.006217	76.58627	0.003107	0.000621335
100	S-19	300	0.033614	0.311924	0.23211	0.000849112	0.012876	0.011846	91.93073	0.003729	0.000745823
101	S-19	300	0.020169	0.187154	0.139266	0.000509467	0.007725	0.007107	55.15844	0.002237	0.000447494
102	S-20	903	0.101179	0.93889	0.69865	0.002555827	0.038756	0.035656	276.7115	0.011225	0.002244926
103	S-20	903	0.060707	0.563334	0.41919	0.001533496	0.023254	0.021393	166.0269	0.006735	0.001346955
104	S-20	903	0.133039	1.39402	1.571314	0.00311719	0.027858	0.025629	241.1286	0.009781	0.001956246
105	S-20	903	0.168629	1.624487	1.043546	0.003515729	0.067817	0.062391	380.7162	0.015444	0.003088703

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	CalEEModType	HP	LF	CalEEMod Bin	Tier Bin	Year	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
106	S-20	Above-Grade Construction	Forklift - 10 K Reach	Diesel	2	8	Rough Terrain Forklifts	130	0.4	5	4	2027	0.284928	2.060712	5.35479	0.008945	0.149408	0.137455	968.2231	0.039275	0.007855
107	S-20	Above-Grade Construction	Forklift - 15 K Reach	Diesel	1	8	Rough Terrain Forklifts	130	0.4	5	4	2027	0.142464	1.030356	2.677395	0.004472	0.074704	0.068727	484.1115	0.019638	0.003928
108	S-20	Above-Grade Construction	Loader	Diesel	2	8	Tractors/Loaders/Backhoes	230	0.37	6	5	2027	0.467237	3.54609	3.58702	0.014622	0.140351	0.129123	1582.757	0.064204	0.012841
109	S-20	Above-Grade Construction	120' Manlift	Diesel	2	5	Aerial Lifts	74	0.31	3	2	2027	0.053802	0.782865	1.608994	0.002467	0.015333	0.014106	266.9633	0.010829	0.002166
110	S-20	Above-Grade Construction	Crane - 200 Ton	Diesel	1	4	Cranes	275	0.29	6	5	2027	0.164334	1.58311	1.016967	0.003426	0.066089	0.060802	371.0191	0.01505	0.00301
111	S-21	Commissioning and Testing	Crane - 35 Ton (Manlift)	Diesel	1	5	Cranes	250	0.29	6	5	2027	0.186743	1.798988	1.155644	0.003893	0.075102	0.069094	421.6127	0.017102	0.00342
112	S-22	Site & ROW Restoration (overhead)	Skid steer loader	Diesel	1	6	Skid Steer Loaders	74	0.37	3	2	2027	0.046893	0.634894	1.17468	0.001769	0.016894	0.015542	191.4657	0.007767	0.001553
113	S-22	Site & ROW Restoration (overhead)	Excavator	Diesel	0	0	Excavators	250	0.38	6	5	2027	0	0	0	0	0	0	0	0	0
114	S-22	Site & ROW Restoration (overhead)	D6 Type Dozer	Diesel	1	6	Crawler Tractors	250	0.43	6	5	2027	0.318298	3.11205	1.986865	0.006921	0.126263	0.116162	749.4217	0.0304	0.00608
115	S-22	Site & ROW Restoration (overhead)	Motor Grader	Diesel	1	6	Graders	250	0.41	6	5	2027	0.275983	2.487694	1.600131	0.006612	0.084808	0.078023	715.8504	0.029038	0.005808
116	S-22	Site & ROW Restoration (overhead)	Grader	Diesel	0	0	Graders	250	0.41	6	5	2027	0	0	0	0	0	0	0	0	0
117	S-22	Site & ROW Restoration (overhead)	Excavator - Mini	Diesel	1	6	Excavators	108	0.38	5	3	2027	0.077138	0.501572	1.670759	0.002648	0.02421	0.022273	286.6345	0.011627	0.002325
118	S-22	Site & ROW Restoration (overhead)	Boom Truck w/Hydraulic Po	Diesel	0	0	Cranes	150	0.29	5	4	2027	0	0	0	0	0	0	0	0	0
119	S-23	Site & ROW Restoration (underground)	Skid steer loader	Diesel	1	6	Skid Steer Loaders	74	0.37	3	2	2027	0.046893	0.634894	1.17468	0.001769	0.016894	0.015542	191.4657	0.007767	0.001553
120	S-23	Site & ROW Restoration (underground)	Excavator	Diesel	0	0	Excavators	250	0.38	6	5	2027	0	0	0	0	0	0	0	0	0
121	S-23	Site & ROW Restoration (underground)	D6 Type Dozer	Diesel	0	0	Crawler Tractors	250	0.43	6	5	2027	0	0	0	0	0	0	0	0	0
122	S-23	Site & ROW Restoration (underground)	Motor Grader	Diesel	0	0	Graders	250	0.41	6	5	2027	0	0	0	0	0	0	0	0	0
123	S-23	Site & ROW Restoration (underground)	Grader	Diesel	0	0	Graders	250	0.41	6	5	2027	0	0	0	0	0	0	0	0	0
124	S-23	Site & ROW Restoration (underground)	Excavator - Mini	Diesel	1	6	Excavators	108	0.38	5	3	2027	0.077138	0.501572	1.670759	0.002648	0.02421	0.022273	286.6345	0.011627	0.002325
125	S-23	Site & ROW Restoration (underground)	Boom Truck w/Hydraulic Po	Diesel	1	6	Cranes	150	0.29	5	4	2027	0.173135	1.542172	1.905083	0.002809	0.082069	0.075503	304.2762	0.012343	0.002469

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
106	S-20	903	0.128645	0.930411	2.417688	0.004038504	0.067458	0.062061	437.1527	0.017733	0.003546565
107	S-20	903	0.064322	0.465206	1.208844	0.002019252	0.033729	0.03103	218.5764	0.008866	0.001773283
108	S-20	903	0.210958	1.60106	1.61954	0.006601736	0.063369	0.058299	714.6146	0.028988	0.005797579
109	S-20	903	0.024292	0.353464	0.726461	0.001113794	0.006923	0.006369	120.5339	0.004889	0.000977877
110	S-20	903	0.074197	0.714774	0.45916	0.001546921	0.029839	0.027452	167.5151	0.006795	0.001359029
111	S-21	253	0.023623	0.227572	0.146189	0.000492514	0.0095	0.00874	53.334	0.002163	0.000432692
112	S-22	127	0.002978	0.040316	0.074592	0.000112334	0.001073	0.000987	12.15807	0.000493	9.86369E-05
113	S-22	127	0	0	0	0	0	0	0	0	0
114	S-22	127	0.020212	0.197615	0.126166	0.000439476	0.008018	0.007376	47.58827	0.00193	0.000386078
115	S-22	127	0.017525	0.157969	0.101608	0.000419833	0.005385	0.004954	45.4565	0.001844	0.000368783
116	S-22	127	0	0	0	0	0	0	0	0	0
117	S-22	127	0.004898	0.03185	0.106093	0.000168159	0.001537	0.001414	18.20129	0.000738	0.000147665
118	S-22	127	0	0	0	0	0	0	0	0	0
119	S-23	98	0.002298	0.03111	0.057559	8.66826E-05	0.000828	0.000762	9.381818	0.000381	7.61135E-05
120	S-23	98	0	0	0	0	0	0	0	0	0
121	S-23	98	0	0	0	0	0	0	0	0	0
122	S-23	98	0	0	0	0	0	0	0	0	0
123	S-23	98	0	0	0	0	0	0	0	0	0
124	S-23	98	0.00378	0.024577	0.081867	0.00012976	0.001186	0.001091	14.04509	0.00057	0.000113946
125	S-23	98	0.008484	0.075566	0.093349	0.000137636	0.004021	0.0037	14.90953	0.000605	0.000120959

Table 19: Off-Road Controlled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	CalEEModType	HP	LF	CalEEMod Bin	Tier Bin Name	Year	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-02	Utility Locates	Air Compressor 340/390hp	Diesel	1	8	Air Compressors	390	0.48	2	Tier 4 Final_6	2027	1.593004	11.68118	15.81629	0.024257	0.267711	0.246294	1876.393	0.076115	0.015223
2	S-02	Utility Locates	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	Tier 4 Final_4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
3	S-03	Mobilization	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	Tier 4 Final_4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
4	S-03	Mobilization	Boom truck	Diesel	1	3	Cranes	150	0.29	5	Tier 4 Final_4	2027	0.086568	0.771086	0.952542	0.001404	0.041034	0.037752	152.1381	0.006171	0.001234
5	S-03	Mobilization	Forklift	Diesel	2	8	Forklifts	100	0.2	5	Tier 4 Final_3	2027	0.125761	0.882577	2.229573	0.003437	0.043097	0.039649	372.0844	0.015093	0.003019
6	S-03	Mobilization	Generator 150-260 kW	Diesel	1	10	Generator Sets	260	0.74	2	Tier 4 Final_5	2027	1.330064	13.93677	15.70927	0.031164	0.278511	0.25623	2410.692	0.097788	0.019558
7	S-03	Mobilization	Light plant	Diesel	4	2	Other Construction Equipment	10	0.42	1	Tier 4 Final_1	2027	0.060849	0.461861	0.361041	0.000945	0.017899	0.016467	62.83666	0.002549	0.00051
8	S-03	Mobilization	Water holding tanks	Diesel	2	10	Other Construction Equipment	0	0.42	1	Tier 4 Final_1	2027	0	0	0	0	0	0	0	0	0
9	S-04	Access Road Construction	Motor Grader	Diesel	2	6	Graders	250	0.41	6	Tier 4 Final_5	2027	0.551967	4.975387	3.200261	0.013223	0.169615	0.156046	1431.701	0.058076	0.011615
10	S-04	Access Road Construction	Skid steer loader	Diesel	1	4	Skid Steer Loaders	74	0.37	3	Tier 4 Final_2	2027	0.031262	0.423263	0.78312	0.001179	0.011262	0.010361	127.6438	0.005178	0.001036
11	S-04	Access Road Construction	D6 Type Dozer	Diesel	1	6	Crawler Tractors	250	0.43	6	Tier 4 Final_5	2027	0.318298	3.11205	1.986865	0.006921	0.126263	0.116162	749.4217	0.0304	0.00608
12	S-04	Access Road Construction	Excavator	Diesel	2	4	Excavators	250	0.38	6	Tier 4 Final_5	2027	0.211596	1.389214	1.839204	0.008177	0.04767	0.043856	884.9445	0.035897	0.007179
13	S-04	Access Road Construction	Vibratory Roller	Diesel	1	4	Rollers	125	0.38	5	Tier 4 Final_4	2027	0.04709	0.366772	1.222124	0.002041	0.015944	0.014668	220.9149	0.008961	0.001792
14	S-04	Access Road Construction	Bulldozer	Diesel	1	6	Crawler Tractors	250	0.43	6	Tier 4 Final_5	2027	0.318298	3.11205	1.986865	0.006921	0.126263	0.116162	749.4217	0.0304	0.00608
15	S-04	Access Road Construction	Road Grader	Diesel	1	6	Graders	250	0.41	6	Tier 4 Final_5	2027	0.275983	2.487694	1.600131	0.006612	0.084808	0.078023	715.8504	0.029038	0.005808
16	S-04	Access Road Construction	Loader	Diesel	1	2	Tractors/Loaders/Backhoes	230	0.37	6	Tier 4 Final_5	2027	0.058405	0.443261	0.448378	0.001828	0.017544	0.01614	197.8446	0.008025	0.001605
17	S-04	Access Road Construction	Mower	Diesel	1	3	Tractors/Loaders/Backhoes	48	0.37	2	Tier 4 Final_1	2027	0.061616	0.417922	0.539002	0.000628	0.014382	0.013231	68.06881	0.002761	0.000552
18	S-05	Conventional Structure Foundation Installation	Compressor	Diesel	1	6	Air Compressors	24	0.48	1	Tier 4 Final_1	2027	0.087372	0.663658	0.394478	0.001152	0.026332	0.024226	86.81266	0.003522	0.000704
19	S-05	Conventional Structure Foundation Installation	Boom truck	Diesel	1	3	Cranes	150	0.29	5	Tier 4 Final_4	2027	0.086568	0.771086	0.952542	0.001404	0.041034	0.037752	152.1381	0.006171	0.001234
20	S-05	Conventional Structure Foundation Installation	Pressure Digger - Lo-Drill (T	Diesel	1	8	Bore/Drill Rigs	275	0.5	6	Tier 4 Final_5	2027	0.277748	2.493142	2.569932	0.011774	0.083079	0.076432	1274.183	0.051686	0.010337
21	S-05	Conventional Structure Foundation Installation	Skid steer loader	Diesel	1	6	Skid Steer Loaders	74	0.37	3	Tier 4 Final_2	2027	0.046893	0.634894	1.17468	0.001769	0.016894	0.015542	191.4657	0.007767	0.001553
22	S-05	Conventional Structure Foundation Installation	Forklift - 10 K Reach	Diesel	2	2	Rough Terrain Forklifts	130	0.4	5	Tier 4 Final_4	2027	0.071232	0.515178	1.338697	0.002236	0.037352	0.034364	242.0558	0.009819	0.001964
23	S-05	Conventional Structure Foundation Installation	Crane - 35 Ton (Manlift)	Diesel	2	5	Cranes	250	0.29	6	Tier 4 Final_5	2027	0.373486	3.597977	2.311288	0.007787	0.150203	0.138187	843.2253	0.034205	0.006841
24	S-05	Conventional Structure Foundation Installation	844 Loader	Diesel	1	6	Rubber Tired Loaders	417	0.36	7	Tier 4 Final_6	2027	0.372735	2.389747	2.475095	0.009678	0.090991	0.083712	1047.792	0.042503	0.008501
25	S-05	Conventional Structure Foundation Installation	Rough Terrain Crane	Diesel	1	6	Cranes	185	0.29	6	Tier 4 Final_5	2027	0.165828	1.597502	1.026212	0.003457	0.06669	0.061355	374.392	0.015187	0.003037
26	S-06	Conventional Structure Installation	Crane - 35 Ton (Manlift)	Diesel	2	2	Cranes	250	0.29	6	Tier 4 Final_5	2027	0.149394	1.439191	0.924515	0.003115	0.060081	0.055275	337.2901	0.013682	0.002736
27	S-06	Conventional Structure Installation	Forklift - 15 K Reach	Diesel	1	1	Rough Terrain Forklifts	130	0.4	5	Tier 4 Final_4	2027	0.017808	0.128794	0.334674	0.000559	0.009338	0.008591	60.51394	0.002455	0.000491
28	S-06	Conventional Structure Installation	Crane - 200 Ton	Diesel	1	4	Cranes	275	0.29	6	Tier 4 Final_5	2027	0.164334	1.58311	1.016967	0.003426	0.066089	0.060802	371.0191	0.01505	0.00301
29	S-06	Conventional Structure Installation	844 Loader	Diesel	1	6	Rubber Tired Loaders	417	0.36	7	Tier 4 Final_6	2027	0.372735	2.389747	2.475095	0.009678	0.090991	0.083712	1047.792	0.042503	0.008501
30	S-10	Helicopter Site Preparation	Mower/Veg Clearing Equipr	Diesel	2	3	Other General Industrial Equipmen	50	0.34	3	Tier 4 Final_2	2027	0.045924	0.442647	0.805525	0.001098	0.015393	0.014161	118.8306	0.00482	0.000964
31	S-10	Helicopter Site Preparation	Chipper	Diesel	1	3	Other General Industrial Equipmen	50	0.34	3	Tier 4 Final_2	2027	0.022962	0.221324	0.402762	0.000549	0.007696	0.007081	59.41531	0.00241	0.000482
32	S-10	Helicopter Site Preparation	Jackhammer	Diesel	1	2	Other Construction Equipment	0	0.42	1	Tier 4 Final_1	2027	0	0	0	0	0	0	0	0	0
33	S-08	Helicopter Landing Pad Construction	Air Compressor 340/390hp	Diesel	1	4	Air Compressors	390	0.48	2	Tier 4 Final_6	2027	0.796502	5.840589	7.908143	0.012129	0.133855	0.123147	938.1965	0.038057	0.007611
34	S-08	Helicopter Landing Pad Construction	Skid steer loader	Diesel	1	4	Skid Steer Loaders	74	0.37	3	Tier 4 Final_2	2027	0.031262	0.423263	0.78312	0.001179	0.011262	0.010361	127.6438	0.005178	0.001036
35	S-08	Helicopter Landing Pad Construction	Excavator - Mini	Diesel	1	4	Excavators	108	0.38	5	Tier 4 Final_3	2027	0.051425	0.334381	1.113839	0.001765	0.01614	0.014849	191.0897	0.007751	0.00155
36	S-08	Helicopter Landing Pad Construction	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
37	S-08	Helicopter Landing Pad Construction	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
38	S-08	Helicopter Landing Pad Construction	Vibrating Plate	Diesel	1	4	Plate Compactors	14	0.43	1	Tier 4 Final_1	2027	0.029025	0.219935	0.184218	0.000469	0.008594	0.007907	30.17042	0.001224	0.000245
39	S-09	Helicopter Landing Platform Construction	Air Compressor 340/390hp	Diesel	1	4	Air Compressors	390	0.48	2	Tier 4 Final_6	2027	0.796502	5.840589	7.908143	0.012129	0.133855	0.123147	938.1965	0.038057	0.007611
40	S-09	Helicopter Landing Platform Construction	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
41	S-09	Helicopter Landing Platform Construction	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
42	S-09	Helicopter Landing Platform Construction	Generator 25 kW	Diesel	1	2	Generator Sets	36	0.74	2	Tier 4 Final_1	2027	0.036833	0.385941	0.435026	0.000863	0.007713	0.007096	66.75763	0.002708	0.000542
43	S-09	Helicopter Landing Platform Construction	Testing Jack (5 hp pump)	Diesel	1	2	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
44	S-09	Helicopter Landing Platform Construction	Micropile Drill Power Unit	Diesel	1	8	Bore/Drill Rigs	310	0.5	7	Tier 4 Final_6	2027	0.267199	1.987894	2.681605	0.013159	0.071308	0.065604	1423.958	0.057762	0.011552
45	S-09	Helicopter Landing Platform Construction	Refueler (small fuel transfe	Diesel	1	1	Other Construction Equipment	0	0.42	1	Tier 4 Final_1	2027	0	0	0	0	0	0	0	0	0
46	S-09	Helicopter Landing Platform Construction	Grout Plant	Diesel	1	8	Cement and Mortar Mixers	20	0.56	1	Tier 4 Final_1	2027	0.109194	0.829199	0.643071	0.001688	0.032221	0.029643	112.6577	0.00457	0.000914
47	S-11	Helicopter Structure Foundation Installation	Air Compressor 340/390hp	Diesel	1	4	Air Compressors	390	0.48	2	Tier 4 Final_6	2027	0.796502	5.840589	7.908143	0.012129	0.133855	0.123147	938.1965	0.038057	0.007611
48	S-11	Helicopter Structure Foundation Installation	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
49	S-11	Helicopter Structure Foundation Installation	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
50	S-11	Helicopter Structure Foundation Installation	Generator 25 kW	Diesel	1	2	Generator Sets	36	0.74	2	Tier 4 Final_1	2027	0.036833	0.385941	0.435026	0.000863	0.007713	0.007096	66.75763	0.002708	0.000542
51	S-11	Helicopter Structure Foundation Installation	Testing Jack (5 hp pump)	Diesel	1	2	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
52	S-11	Helicopter Structure Foundation Installation	Micropile Drill Power Unit	Diesel	1	8	Bore/Drill Rigs	310	0.5	7	Tier 4 Final_6	2027	0.267199	1.987894	2.681605	0.013159	0.071308	0.065604	1423.958	0.057762	0.011552
53	S-11	Helicopter Structure Foundation Installation	Refueler (small fuel transfe	Diesel	1	1	Other Construction Equipment	0	0.42	1	Tier 4 Final_1	2027	0	0	0	0	0	0	0	0	0
54	S-11	Helicopter Structure Foundation Installation	Grout Plant	Diesel	1	8	Cement and Mortar Mixers	20	0.56	1	Tier 4 Final_1	2027	0.109194	0.829199	0.643071	0.001688	0.032221	0.029643	112.6577	0.00457	0.000914
55	S-12	Helicopter Structure Installation	Fire Deck (5 hp pump)	Diesel	1	1	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.004606	0.034974	0.024353	6.63E-05	0.001415	0.001302	4.635648	0.000188	3.76E-05
56	S-12	Helicopter Structure Installation	Water Buffalo Deck (5 hp pu	Diesel	1	2	Pumps	5	0.74	1	Tier 4 Final_1	2027	0.009213	0.069948	0.048707	0.000133	0.00283	0.002604	9.271296	0.000376	7.52E-05
57	S-12	Helicopter Structure Installation	Generator 25 kW	Diesel	1	2	Generator Sets	36	0.74	2	Tier 4 Final_1	2027	0.036833	0.385941	0.435026	0.000863	0.007713	0.007096	66.75763	0.002708	0.000542
58	S-13	Conductor Installation	Crane - 35 Ton (Manlift)	Diesel	3	5	Cranes	250	0.29	6	Tier 4 Final_5	2027	0.560229	5.396965	3.466932	0.01168	0.225305	0.207281	1264.838	0.051307	0.010261
59	S-13	Conductor Installation	D8 Sag Dozer	Diesel	3	10	Crawler Tractors	200	0.43	6	Tier 4 Final_5	2027	1.273194	12.4482	7.94746	0.027684	0.505052	0.464648	2997.687	0.121599	0.02432
60	S-13	Conductor Installation	Wire Puller	Diesel	1	5	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
61	S-13	Conductor Installation	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
62	S-13	Conductor Installation	Wire Puller	Diesel	0	3	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
63	S-13	Conductor Installation	Boom Truck w/Hydraulic Po	Diesel	1	1	Cranes	150	0.29	5	Tier 4 Final_4	2027	0.028856	0.257029	0.317514	0.000468	0.013678	0.012584	50.71269	0.002057	0.000411
64	S-13	Conductor Installation	Hydraulic Pole Puller	Diesel	1	1	Cranes	150	0.29	5	Tier 4 Final_4	2027	0.028856	0.257029	0.317514	0.000468	0.013678	0.012584	50.71269	0.002057	0.000411
65	S-14	Excavate Trench	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	Tier 4 Final_4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
66	S-14	Excavate Trench	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	Tier 4 Final_1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
67	S-14	Excavate Trench	Air Compressor 340/390hp	Diesel	1	8	Air Compressors	390	0.48	2	Tier 4 Final_6	2027	1.593004	11.68118	15.81629	0.024257	0.267711	0.246294	1876.393	0.076115	0.015223
68	S-14	Excavate Trench	Concrete Saw	Diesel	1	2	Concrete/Industrial Saws	13	0.73	1	Tier 4 Final_1	2027	0.024676	0.18868	0.10191	0.000314	0.00705	0.006486	24.75025	0.001004	0.000201
69	S-14	Excavate Trench	Loader	Diesel	1	6	Tractors/Loaders/Backhoes	230	0.37	6	Tier 4 Final_5	2027	0.175214	1.329784	1.345133	0.005483	0.052632	0.048421	593.5337	0.024076	0.004815
70	S-14	Excavate Trench	Trackhoe	Diesel	4	4	Excavators	250	0.38	6	Tier 4 Final_5	2027	0.423191	2.778428	3.678408	0.016353	0.095339	0.087712	1769.889	0.071794	0.014359
71	S-14	Excavate Trench	Trencher	Diesel	2	5	Trenchers	75	0.5	4	Tier 4 Final_3	2027	0.30107	2.897835	2.970015	0.004031	0.178091	0.163844	436.8367	0.01772	0.003544
72	S-14	Excavate Trench	Light plant	Diesel	4	10	Other Construction Equipment	10	0.42	1	Tier 4 Final_1	2027	0.304244	2.309304	1.805207	0.004725	0.089495	0.082335	314.1833	0.012745	0.002549
73	S-15	Duct Bank & Conduit Installation	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	Tier 4 Final_4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
74	S-15	Duct Bank & Conduit Installation	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	Tier 4 Final_1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
75	S-15	Duct Bank & Conduit Installation	Air Compressor 340/390hp	Diesel	1	8	Air Compressors	390	0.48	2	Tier 4 Final_6	2027	1.593004	11.68118	15.81629	0.024257	0.267711	0.246294	1876.393	0.076115	0.015223
76	S-15	Duct Bank & Conduit Installation	Loader	Diesel	1	6	Tractors/Loaders/Backhoes	230	0.37	6	Tier 4 Final_5	2027	0.175214	1.329784	1.345133	0.005483	0.052632	0.048421	593.5337	0.024076	0.004815
77	S-15	Duct Bank & Conduit Installation	Trackhoe	Diesel	4	4	Excavators	250	0.38	6	Tier 4 Final_5	2027	0.423191	2.778428	3.678408	0.016353	0.095339	0.087712	1769.889	0.071794	0.014359
78	S-15	Duct Bank & Conduit Installation	Trencher	Diesel	2	5	Trenchers	75	0.5	4	Tier 4 Final_3	2027	0.30107	2.897835	2.970015	0.004031	0.178091	0.163844	436.8367	0.01772	0.003544
79	S-16	Cable Installation	Cable Reel	Diesel	1	5	Other Construction Equipment	175	0.42	6	Tier 4 Final_5	2027	0.156867	1.455644	1.083179	0.003963	0.060087	0.05528	429.0101	0.017403	0.003481
80	S-16	Cable Installation	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	Tier 4 Final_1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
81	S-16	Cable Installation	Pulling Rig	Diesel	1	5	Other Construction Equipment	175	0.42	6	Tier 4 Final_5	2027	0.156867	1.455644	1.083179	0.003963	0.060087	0.05528	429.0101	0.017403	0.003481
82	S-17	Paving	Grinder	Diesel	1	3	Other Construction Equipment	15	0.42	1	Tier 4 Final_1	2027	0.034227	0.259797	0.203086	0.000532	0.010068	0.009263	35.34562	0.001434	0.000287
83	S-17	Paving	Arrow Board	Diesel	2	8	Signal Boards	10	0.82	1	Tier 4 Final_1	2027	0.158136	1.198274	1.003681	0.002558	0.046823	0.043077	164.3781	0.006668	0.001334
84	S-17	Paving	Bitumen (emulsion) sprayer	Diesel	1	1	Other Construction Equipment	5	0.42	1	Tier 4 Final_1	2027	0.003803	0.028866	0.022565	5.91E-05	0.001119	0.001029	3.927291	0.000159	3.19E-05
85	S-17	Paving	A/C Roller 5-7 Ton	Diesel	1	8	Rollers	74	0.38	3	Tier 4 Final_2	2027	0.944979	7.550686	3.086187	0.002396	0.544848	0.50126	261.6373	0.010613	0.002123
86	S-17	Paving	Backhoe	Diesel	1	6	Tractors/Loaders/Backhoes	150	0.37	5	Tier 4 Final_4	2027	0.110476	0.715101	2.279898	0.003567	0.034845	0.032057	386.1082	0.015662	0.003132
87	S-18	Site Preparation	Backhoe	Diesel	2	6	Tractors/Loaders/Backhoes	150	0.37	5	Tier 4 Final_4	2027	0.220953	1.430203	4.559797	0.007134	0.069689	0.064114	772.2164	0.031324	0.006265
88	S-18	Site Preparation	Boom truck	Diesel	1	1	Cranes	150	0.29	5	Tier 4 Final_4	2027	0.028856	0.257029	0.317514	0.000468	0.013678	0.012584	50.71269	0.002057	0.000411
89	S-18	Site Preparation	Forklift	Diesel	1	8	Forklifts	100	0.2	5	Tier 4 Final_3	2027	0.06288	0.441288	1.114787	0.001718	0.021548	0.019825	186.0422	0.007547	0.001509
90	S-18	Site Preparation	Loader	Diesel	1	2	Tractors/Loaders/Backhoes	230	0.37	6	Tier 4 Final_5	2027	0.058405	0.443261	0.448378	0.001828	0.017544	0.01614	197.8446	0.008025	0.001605
91	S-19	Below-Grade Construction	Excavator	Diesel	2	8	Excavators	250	0.38	6	Tier 4 Final_5	2027	0.423191	2.778428	3.678408	0.016353	0.095339	0.087712	1769.889	0.071794	0.014359
92	S-19	Below-Grade Construction	Forklift - 15 K Reach	Diesel	1	0	Rough Terrain Forklifts	130	0.4	5	Tier 4 Final_4	2027	0	0	0	0	0	0	0	0	0
93	S-19	Below-Grade Construction	Backhoe - 2X4	Diesel	2	6	Tractors/Loaders/Backhoes	68	0.37	3	Tier 4 Final_2	2027	1.035743	8.102871	3.465433	0.003225	0.666964	0.613607	351.646	0.014264	0.002853
94	S-19	Below-Grade Construction	Excavator - Mini	Diesel	1	8	Excavators	108	0.38	5	Tier 4 Final_3	2027	0.10285	0.668762	2.227678	0.003531	0.032279	0.029697	382.1794	0.015503	0.003101
95	S-19	Below-Grade Construction	Generator 25 kW	Diesel	1	8	Generator Sets	36	0.74	2	Tier 4 Final_1	2027	0.14733	1.543766	1.740104	0.003452	0.03085	0.028382	267.0305	0.010832	0.002166
96	S-19	Below-Grade Construction	Loader	Diesel	2	8	Tractors/Loaders/Backhoes	230	0.37	6	Tier 4 Final_5	2027	0.467237	3.54609	3.58702	0.014622	0.140351	0.129123	1582.757	0.064204	0.012841
97	S-19	Below-Grade Construction	Pressure Digger - Lo-Drill (T	Diesel	1	5	Bore/Drill Rigs	275	0.5	6	Tier 4 Final_5	2027	0.173593	1.558214	1.606208	0.007358	0.051924	0.04777	796.3646	0.032304	0.006461
98	S-19	Below-Grade Construction	Trencher	Diesel	2	5	Trenchers	75	0.5	4	Tier 4 Final_3	2027	0.30107	2.897835	2.970015	0.004031	0.178091	0.163844	436.8367	0.01772	0.003544
99	S-19	Below-Grade Construction	Skid steer loader	Diesel	2	8	Skid Steer Loaders	74	0.37	3	Tier 4 Final_2	2027	0.125048	1.693051	3.132479	0.004717	0.045049	0.041446	510.5751	0.020711	0.004142
100	S-19	Below-Grade Construction	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
101	S-19	Below-Grade Construction	Wire Puller	Diesel	1	3	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0.134457	1.247695	0.928439	0.003396	0.051503	0.047383	367.7229	0.014916	0.002983
102	S-20	Above-Grade Construction	Wire Trailer/ Tensioner	Diesel	1	5	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0.224095	2.079491	1.547398	0.005661	0.085839	0.078972	612.8716	0.024861	0.004972
103	S-20	Above-Grade Construction	Wire Puller	Diesel	1	3	Other Construction Equipment	250	0.42	6	Tier 4 Final_5	2027	0.134457	1.247695	0.928439	0.003396	0.051503	0.047383	367.7229	0.014916	0.002983
104	S-20	Above-Grade Construction	Generator 25 kW	Diesel	2	8	Generator Sets	36	0.74	2	Tier 4 Final_1	2027	0.29466	3.087531	3.480207	0.006904	0.061701	0.056765	534.061	0.021664	0.004333
105	S-20	Above-Grade Construction	Crane - 35 Ton (Manlift)	Diesel	2	5	Cranes	250	0.29	6	Tier 4 Final_5	2027	0.373486	3.597977	2.311288	0.007787	0.150203	0.138187	843.2253	0.034205	0.006841

Table 20: Off-Road Controlled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-02	1052	0.83792	6.144299	8.319366	0.012759223	0.140816	0.129551	986.9827	0.040036	0.008007267
2	S-02	1052	0.116221	0.752287	2.398453	0.003752508	0.036657	0.033724	406.1858	0.016477	0.003295335
3	S-03	47	0.005192	0.03361	0.107155	0.00016765	0.001638	0.001507	18.14708	0.000736	0.000147225
4	S-03	47	0.002034	0.018121	0.022385	3.30045E-05	0.000964	0.000887	3.575245	0.000145	2.90055E-05
5	S-03	47	0.002955	0.020741	0.052395	8.07692E-05	0.001013	0.000932	8.743983	0.000355	7.09388E-05
6	S-03	47	0.031256	0.327514	0.369168	0.000732359	0.006545	0.006021	56.65127	0.002298	0.000459605
7	S-03	47	0.00143	0.010854	0.008484	2.22096E-05	0.000421	0.000387	1.476661	5.99E-05	1.198E-05
8	S-03	47	0	0	0	0	0	0	0	0	0
9	S-04	203	0.056025	0.505002	0.324827	0.001342145	0.017216	0.015839	145.3176	0.005895	0.001178944
10	S-04	203	0.003173	0.042961	0.079487	0.000119705	0.001143	0.001052	12.95584	0.000526	0.000105109
11	S-04	203	0.032307	0.315873	0.201667	0.00070247	0.012816	0.01179	76.0663	0.003086	0.000617116
12	S-04	203	0.021477	0.141005	0.186679	0.000829915	0.004838	0.004451	89.82186	0.003644	0.000728714
13	S-04	203	0.00478	0.037227	0.124046	0.000207192	0.001618	0.001489	22.42286	0.00091	0.000181914
14	S-04	203	0.032307	0.315873	0.201667	0.00070247	0.012816	0.01179	76.0663	0.003086	0.000617116
15	S-04	203	0.028012	0.252501	0.162413	0.000671072	0.008608	0.007919	72.65882	0.002947	0.000589472
16	S-04	203	0.005928	0.044991	0.04551	0.000185514	0.001781	0.001638	20.08122	0.000815	0.000162916
17	S-04	203	0.006254	0.042419	0.054709	6.37219E-05	0.00146	0.001343	6.908984	0.00028	5.60517E-05
18	S-05	303	0.013237	0.100544	0.059763	0.000174491	0.003989	0.00367	13.15212	0.000534	0.000106701
19	S-05	303	0.013115	0.11682	0.14431	0.000212774	0.006217	0.005719	23.04892	0.000935	0.000186993
20	S-05	303	0.042079	0.377711	0.389345	0.001783696	0.012586	0.01158	193.0388	0.00783	0.001566099
21	S-05	303	0.007104	0.096186	0.177964	0.000268008	0.002559	0.002355	29.00705	0.001177	0.000235331
22	S-05	303	0.010792	0.078049	0.202813	0.000338778	0.005659	0.005206	36.67145	0.001488	0.000297511
23	S-05	303	0.056583	0.545094	0.35016	0.001179697	0.022756	0.020935	127.7486	0.005182	0.001036409
24	S-05	303	0.056469	0.362047	0.374977	0.001466235	0.013785	0.012682	158.7406	0.006439	0.001287842
25	S-05	303	0.025123	0.242022	0.155471	0.000523785	0.010104	0.009295	56.72039	0.002301	0.000460165
26	S-06	252	0.018824	0.181338	0.116489	0.000392454	0.00757	0.006965	42.49856	0.001724	0.000344785
27	S-06	252	0.002244	0.016228	0.042169	7.0439E-05	0.001177	0.001082	7.624757	0.000309	6.18587E-05
28	S-06	252	0.020706	0.199472	0.128138	0.000431699	0.008327	0.007661	46.74841	0.001896	0.000379264
29	S-06	252	0.046965	0.301108	0.311862	0.001219443	0.011465	0.010548	132.0218	0.005355	0.001071077
30	S-10	203	0.004661	0.044929	0.081761	0.000111397	0.001562	0.001437	12.06131	0.000489	9.78519E-05
31	S-10	203	0.002331	0.022464	0.04088	5.56986E-05	0.000781	0.000719	6.030654	0.000245	4.89259E-05
32	S-10	203	0	0	0	0	0	0	0	0	0
33	S-08	203	0.080845	0.59282	0.802676	0.001231047	0.013586	0.012499	95.22694	0.003863	0.000772564
34	S-08	203	0.003173	0.042961	0.079487	0.000119705	0.001143	0.001052	12.95584	0.000526	0.000105109
35	S-08	203	0.00522	0.03394	0.113055	0.000179193	0.001638	0.001507	19.3956	0.000787	0.000157354
36	S-08	203	0.000468	0.00355	0.002472	6.72763E-06	0.000144	0.000132	0.470518	1.91E-05	3.81726E-06
37	S-08	203	0.000935	0.0071	0.004944	1.34553E-05	0.000287	0.000264	0.941037	3.82E-05	7.63451E-06
38	S-08	203	0.002946	0.022323	0.018698	4.76521E-05	0.000872	0.000803	3.062298	0.000124	2.4844E-05
39	S-09	203	0.080845	0.59282	0.802676	0.001231047	0.013586	0.012499	95.22694	0.003863	0.000772564
40	S-09	203	0.000468	0.00355	0.002472	6.72763E-06	0.000144	0.000132	0.470518	1.91E-05	3.81726E-06
41	S-09	203	0.000935	0.0071	0.004944	1.34553E-05	0.000287	0.000264	0.941037	3.82E-05	7.63451E-06
42	S-09	203	0.003739	0.039173	0.044155	8.75955E-05	0.000783	0.00072	6.775899	0.000275	5.4972E-05
43	S-09	203	0.000935	0.0071	0.004944	1.34553E-05	0.000287	0.000264	0.941037	3.82E-05	7.63451E-06
44	S-09	203	0.027121	0.201771	0.272183	0.001335595	0.007238	0.006659	144.5318	0.005863	0.001172568
45	S-09	203	0	0	0	0	0	0	0	0	0
46	S-09	203	0.011083	0.084164	0.065272	0.000171364	0.00327	0.003009	11.43475	0.000464	9.27687E-05
47	S-11	216	0.086022	0.630784	0.854079	0.001309882	0.014456	0.0133	101.3252	0.00411	0.000822039
48	S-11	216	0.000497	0.003777	0.00263	7.15847E-06	0.000153	0.000141	0.50065	2.03E-05	4.06171E-06
49	S-11	216	0.000995	0.007554	0.00526	1.43169E-05	0.000306	0.000281	1.0013	4.06E-05	8.12342E-06
50	S-11	216	0.003978	0.041682	0.046983	9.3205E-05	0.000833	0.000766	7.209824	0.000292	5.84924E-05
51	S-11	216	0.000995	0.007554	0.00526	1.43169E-05	0.000306	0.000281	1.0013	4.06E-05	8.12342E-06
52	S-11	216	0.028857	0.214693	0.289613	0.001421126	0.007701	0.007085	153.7875	0.006238	0.001247659
53	S-11	216	0	0	0	0	0	0	0	0	0
54	S-11	216	0.011793	0.089553	0.069452	0.000182338	0.00348	0.003201	12.16703	0.000494	9.87096E-05
55	S-12	164	0.000378	0.002868	0.001997	5.43513E-06	0.000116	0.000107	0.380123	1.54E-05	3.08389E-06
56	S-12	164	0.000755	0.005736	0.003994	1.08703E-05	0.000232	0.000214	0.760246	3.08E-05	6.16778E-06
57	S-12	164	0.00302	0.031647	0.035672	7.07668E-05	0.000632	0.000582	5.474126	0.000222	4.44109E-05
58	S-13	76	0.021289	0.205085	0.131743	0.000443846	0.008562	0.007877	48.06384	0.00195	0.000389936
59	S-13	76	0.048381	0.473032	0.302003	0.001051974	0.019192	0.017657	113.9121	0.004621	0.000924155
60	S-13	76	0.008516	0.079021	0.058801	0.000215108	0.003262	0.003001	23.28912	0.000945	0.000188942
61	S-13	76	0.008516	0.079021	0.058801	0.000215108	0.003262	0.003001	23.28912	0.000945	0.000188942
62	S-13	76	0	0	0	0	0	0	0	0	0
63	S-13	76	0.001097	0.009767	0.012066	1.77896E-05	0.00052	0.000478	1.927082	7.82E-05	1.56342E-05
64	S-13	76	0.001097	0.009767	0.012066	1.77896E-05	0.00052	0.000478	1.927082	7.82E-05	1.56342E-05
65	S-14	201	0.022206	0.143735	0.45826	0.000716972	0.007004	0.006443	77.60775	0.003148	0.000629622
66	S-14	201	0.015893	0.120427	0.10087	0.000257066	0.004706	0.004329	16.52	0.00067	0.000134025
67	S-14	201	0.160097	1.173958	1.589537	0.002437836	0.026905	0.024753	188.5775	0.00765	0.001529906
68	S-14	201	0.00248	0.018962	0.010242	3.15604E-05	0.000709	0.000652	2.487401	0.000101	2.018E-05
69	S-14	201	0.017609	0.133643	0.135186	0.000551059	0.005289	0.004866	59.65014	0.00242	0.000483934
70	S-14	201	0.042531	0.279232	0.36968	0.001643477	0.009582	0.008815	177.8738	0.007215	0.001443068
71	S-14	201	0.030258	0.291232	0.298486	0.000405146	0.017898	0.016466	43.90209	0.001781	0.000356172
72	S-14	201	0.030577	0.232085	0.181423	0.000474908	0.008994	0.008275	31.57542	0.001281	0.000256167
73	S-15	199	0.021985	0.142305	0.4537	0.000709837	0.006934	0.006379	76.83553	0.003117	0.000623357
74	S-15	199	0.015735	0.119228	0.099866	0.000254508	0.004659	0.004286	16.35562	0.000663	0.000132691
75	S-15	199	0.158504	1.162277	1.57372	0.002413579	0.026637	0.024506	186.7011	0.007573	0.001514683
76	S-15	199	0.017434	0.132313	0.133841	0.000545575	0.005237	0.004818	59.05661	0.002396	0.000479119
77	S-15	199	0.042108	0.276454	0.366002	0.001627124	0.009486	0.008727	176.1039	0.007144	0.001428709
78	S-15	199	0.029956	0.288335	0.295516	0.000401115	0.01772	0.016302	43.46525	0.001763	0.000352628
79	S-16	227	0.017804	0.165216	0.122941	0.000449746	0.00682	0.006274	48.69264	0.001975	0.000395037
80	S-16	227	0.017948	0.136004	0.113918	0.000290318	0.005314	0.004889	18.65692	0.000757	0.000151361
81	S-16	227	0.017804	0.165216	0.122941	0.000449746	0.00682	0.006274	48.69264	0.001975	0.000395037
82	S-17	201	0.00344	0.02611	0.02041	5.34272E-05	0.001012	0.000931	3.552235	0.000144	2.88188E-05
83	S-17	201	0.015893	0.120427	0.10087	0.000257066	0.004706	0.004329	16.52	0.00067	0.000134025
84	S-17	201	0.000382	0.002901	0.002268	5.93636E-06	0.000112	0.000103	0.394693	1.6E-05	3.20209E-06
85	S-17	201	0.09497	0.758844	0.310162	0.000240752	0.054757	0.050377	26.29455	0.001067	0.000213324
86	S-17	201	0.011103	0.071868	0.22913	0.000358486	0.003502	0.003222	38.80387	0.001574	0.000314811
87	S-18	78	0.008617	0.055778	0.177832	0.000278228	0.002718	0.0025	30.11644	0.001222	0.000244331
88	S-18	78	0.001125	0.010024	0.012383	1.82578E-05	0.000533	0.000491	1.977795	8.02E-05	1.60456E-05
89	S-18	78	0.002452	0.01721	0.043477	6.70212E-05	0.00084	0.000773	7.255646	0.000294	5.88641E-05
90	S-18	78	0.002278	0.017287	0.017487	7.12812E-05	0.000684	0.000629	7.715938	0.000313	6.25984E-05
91	S-19	300	0.063479	0.416764	0.551761	0.002452951	0.014301	0.013157	265.4833	0.010769	0.002153833
92	S-19	300	0	0	0	0	0	0	0	0	0
93	S-19	300	0.155361	1.215431	0.519815	0.000483819	0.100045	0.092041	52.7469	0.00214	0.000427929
94	S-19	300	0.015428	0.100314	0.334152	0.000529633	0.004842	0.004455	57.32691	0.002325	0.000465086
95	S-19	300	0.0221	0.231565	0.261016	0.000517806	0.004628	0.004257	40.05458	0.001625	0.000324958
96	S-19	300	0.070086	0.531914	0.538053	0.002193268	0.021053	0.019368	237.4135	0.009631	0.001926106
97	S-19	300	0.026039	0.233732	0.240931	0.001103772	0.007789	0.007166	119.4547	0.004846	0.000969121
98	S-19	300	0.045161	0.434675	0.445502	0.000604696	0.026714	0.024577	65.52551	0.002658	0.0005316
99	S-19	300	0.018757	0.253958	0.469872	0.000707613	0.006757	0.006217	76.58627	0.003107	0.000621335
100	S-19	300	0.033614	0.311924	0.23211	0.000849112	0.012876	0.011846	91.93073	0.003729	0.000745823
101	S-19	300	0.020169	0.187154	0.139266	0.000509467	0.007725	0.007107	55.15844	0.002237	0.000447494
102	S-20	903	0.101179	0.93889	0.69865	0.002555827	0.038756	0.035656	276.7115	0.011225	0.002244926
103	S-20	903	0.060707	0.563334	0.41919	0.001533496	0.023254	0.021393	166.0269	0.006735	0.001346955
104	S-20	903	0.133039	1.39402	1.571314	0.00311719	0.027858	0.025629	241.1286	0.009781	0.001956246
105	S-20	903	0.168629	1.624487	1.043546	0.003515729	0.067817	0.062391	380.7162	0.015444	0.003088703

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	CalEEModType	HP	LF	CalEEMod Bin	Tier Bin Name	Year	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
106	S-20	Above-Grade Construction	Forklift - 10 K Reach	Diesel	2	8	Rough Terrain Forklifts	130	0.4	5	Tier 4 Final_4	2027	0.284928	2.060712	5.35479	0.008945	0.149408	0.137455	968.2231	0.039275	0.007855
107	S-20	Above-Grade Construction	Forklift - 15 K Reach	Diesel	1	8	Rough Terrain Forklifts	130	0.4	5	Tier 4 Final_4	2027	0.142464	1.030356	2.677395	0.004472	0.074704	0.068727	484.1115	0.019638	0.003928
108	S-20	Above-Grade Construction	Loader	Diesel	2	8	Tractors/Loaders/Backhoes	230	0.37	6	Tier 4 Final_5	2027	0.467237	3.54609	3.58702	0.014622	0.140351	0.129123	1582.757	0.064204	0.012841
109	S-20	Above-Grade Construction	120' Manlift	Diesel	2	5	Aerial Lifts	74	0.31	3	Tier 4 Final_2	2027	0.053802	0.782865	1.608994	0.002467	0.015333	0.014106	266.9633	0.010829	0.002166
110	S-20	Above-Grade Construction	Crane - 200 Ton	Diesel	1	4	Cranes	275	0.29	6	Tier 4 Final_5	2027	0.164334	1.58311	1.016967	0.003426	0.066089	0.060802	371.0191	0.01505	0.00301
111	S-21	Commissioning and Testing	Crane - 35 Ton (Manlift)	Diesel	1	5	Cranes	250	0.29	6	Tier 4 Final_5	2027	0.186743	1.798988	1.155644	0.003893	0.075102	0.069094	421.6127	0.017102	0.00342
112	S-22	Site & ROW Restoration (overhead)	Skid steer loader	Diesel	1	6	Skid Steer Loaders	74	0.37	3	Tier 4 Final_2	2027	0.046893	0.634894	1.17468	0.001769	0.016894	0.015542	191.4657	0.007767	0.001553
113	S-22	Site & ROW Restoration (overhead)	Excavator	Diesel	0	0	Excavators	250	0.38	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
114	S-22	Site & ROW Restoration (overhead)	D6 Type Dozer	Diesel	1	6	Crawler Tractors	250	0.43	6	Tier 4 Final_5	2027	0.318298	3.11205	1.986865	0.006921	0.126263	0.116162	749.4217	0.0304	0.00608
115	S-22	Site & ROW Restoration (overhead)	Motor Grader	Diesel	1	6	Graders	250	0.41	6	Tier 4 Final_5	2027	0.275983	2.487694	1.600131	0.006612	0.084808	0.078023	715.8504	0.029038	0.005808
116	S-22	Site & ROW Restoration (overhead)	Grader	Diesel	0	0	Graders	250	0.41	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
117	S-22	Site & ROW Restoration (overhead)	Excavator - Mini	Diesel	1	6	Excavators	108	0.38	5	Tier 4 Final_3	2027	0.077138	0.501572	1.670759	0.002648	0.02421	0.022273	286.6345	0.011627	0.002325
118	S-22	Site & ROW Restoration (overhead)	Boom Truck w/Hydraulic Pc	Diesel	0	0	Cranes	150	0.29	5	Tier 4 Final_4	2027	0	0	0	0	0	0	0	0	0
119	S-23	Site & ROW Restoration (underground)	Skid steer loader	Diesel	1	6	Skid Steer Loaders	74	0.37	3	Tier 4 Final_2	2027	0.046893	0.634894	1.17468	0.001769	0.016894	0.015542	191.4657	0.007767	0.001553
120	S-23	Site & ROW Restoration (underground)	Excavator	Diesel	0	0	Excavators	250	0.38	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
121	S-23	Site & ROW Restoration (underground)	D6 Type Dozer	Diesel	0	0	Crawler Tractors	250	0.43	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
122	S-23	Site & ROW Restoration (underground)	Motor Grader	Diesel	0	0	Graders	250	0.41	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
123	S-23	Site & ROW Restoration (underground)	Grader	Diesel	0	0	Graders	250	0.41	6	Tier 4 Final_5	2027	0	0	0	0	0	0	0	0	0
124	S-23	Site & ROW Restoration (underground)	Excavator - Mini	Diesel	1	6	Excavators	108	0.38	5	Tier 4 Final_3	2027	0.077138	0.501572	1.670759	0.002648	0.02421	0.022273	286.6345	0.011627	0.002325
125	S-23	Site & ROW Restoration (underground)	Boom Truck w/Hydraulic Pc	Diesel	1	6	Cranes	150	0.29	5	Tier 4 Final_4	2027	0.173135	1.542172	1.905083	0.002809	0.082069	0.075503	304.2762	0.012343	0.002469

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
106	S-20	903	0.128645	0.930411	2.417688	0.004038504	0.067458	0.062061	437.1527	0.017733	0.003546565
107	S-20	903	0.064322	0.465206	1.208844	0.002019252	0.033729	0.03103	218.5764	0.008866	0.001773283
108	S-20	903	0.210958	1.60106	1.61954	0.006601736	0.063369	0.058299	714.6146	0.028988	0.005797579
109	S-20	903	0.024292	0.353464	0.726461	0.001113794	0.006923	0.006369	120.5339	0.004889	0.000977877
110	S-20	903	0.074197	0.714774	0.45916	0.001546921	0.029839	0.027452	167.5151	0.006795	0.001359029
111	S-21	253	0.023623	0.227572	0.146189	0.000492514	0.0095	0.00874	53.334	0.002163	0.000432692
112	S-22	127	0.002978	0.040316	0.074592	0.000112334	0.001073	0.000987	12.15807	0.000493	9.86369E-05
113	S-22	127	0	0	0	0	0	0	0	0	0
114	S-22	127	0.020212	0.197615	0.126166	0.000439476	0.008018	0.007376	47.58827	0.00193	0.000386078
115	S-22	127	0.017525	0.157969	0.101608	0.000419833	0.005385	0.004954	45.4565	0.001844	0.000368783
116	S-22	127	0	0	0	0	0	0	0	0	0
117	S-22	127	0.004898	0.03185	0.106093	0.000168159	0.001537	0.001414	18.20129	0.000738	0.000147665
118	S-22	127	0	0	0	0	0	0	0	0	0
119	S-23	98	0.002298	0.03111	0.057559	8.66826E-05	0.000828	0.000762	9.381818	0.000381	7.61135E-05
120	S-23	98	0	0	0	0	0	0	0	0	0
121	S-23	98	0	0	0	0	0	0	0	0	0
122	S-23	98	0	0	0	0	0	0	0	0	0
123	S-23	98	0	0	0	0	0	0	0	0	0
124	S-23	98	0.00378	0.024577	0.081867	0.00012976	0.001186	0.001091	14.04509	0.00057	0.000113946
125	S-23	98	0.008484	0.075566	0.093349	0.000137636	0.004021	0.0037	14.90953	0.000605	0.000120959

Table 21: On-Road Uncontrolled Daily Exhaust Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	HP	Quantity	Year	Trips/Day	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	Survey and Staking	Pickup - 1/2 Ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0.022819	0.02194	0.273424	0.000721	0.00414	0.001525	72.96607	0.001881	0.001898
2	S-02	Utility Locates	Flatbed truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0.0243	0.585773	0.327934	0.003044	0.025116	0.011135	321.413	0.001129	0.050639
3	S-02	Utility Locates	Pickup - 1 Ton	Diesel	410	2	2027	4	25	100	98	98	2	passenger	0.036915	0.153624	0.270262	0.000751	0.032018	0.02813	79.22858	0.001715	0.012482
4	S-03	Mobilization	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
5	S-03	Mobilization	Gang truck	Diesel	350	2	2027	4	25	100	98	98	2	passenger	0.036915	0.153624	0.270262	0.000751	0.032018	0.02813	79.22858	0.001715	0.012482
6	S-03	Mobilization	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
7	S-03	Mobilization	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0.0243	0.585773	0.327934	0.003044	0.025116	0.011135	321.413	0.001129	0.050639
8	S-03	Mobilization	Water truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
9	S-04	Access Road Construction	Pickup - 1/2 ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0.022819	0.02194	0.273424	0.000721	0.00414	0.001525	72.96607	0.001881	0.001898
10	S-04	Access Road Construction	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
11	S-04	Access Road Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
12	S-04	Access Road Construction	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
13	S-05	Conventional Structure Foundation Installation	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0.0486	1.171546	0.655867	0.006087	0.050233	0.02227	642.8259	0.002257	0.101277
14	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
15	S-05	Conventional Structure Foundation Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
16	S-05	Conventional Structure Foundation Installation	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
17	S-06	Conventional Structure Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
18	S-06	Conventional Structure Installation	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
19	S-06	Conventional Structure Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
20	S-10	Helicopter Site Preparation	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0.002215	0.116117	0.022567	0.000984	0.005915	0.002479	103.9414	0.000103	0.016376
21	S-07	Helicopter Support	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0.002215	0.116117	0.022567	0.000984	0.005915	0.002479	103.9414	0.000103	0.016376
22	S-13	Conductor Installation	Jet Fuel Truck	Diesel	300	0	2027	0	20	0	98	0	0	vendor	0	0	0	0	0	0	0	0	0
23	S-13	Conductor Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
24	S-13	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
25	S-13	Conductor Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
26	S-14	Excavate Trench	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
27	S-14	Excavate Trench	Foreman Truck	Diesel	300	3	2027	6	20	120	99	118.8	1.2	passenger	0.044298	0.184348	0.324315	0.000901	0.038422	0.033756	95.07429	0.002058	0.014979
28	S-14	Excavate Trench	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
29	S-14	Excavate Trench	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
30	S-14	Excavate Trench	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
31	S-15	Duct Bank & Conduit Installation	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
32	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
33	S-15	Duct Bank & Conduit Installation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
34	S-17	Paving	Concrete Truck	Diesel	425	5	2027	10	20	200	98	196	4	hhdt	0.06075	1.464432	0.819834	0.007609	0.062791	0.027838	803.5324	0.002822	0.126597
35	S-17	Paving	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
36	S-17	Paving	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
37	S-18	Site Preparation	Flatbed truck	Diesel	350	0	2027	0	20	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
38	S-18	Site Preparation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
39	S-18	Site Preparation	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0.0243	0.585773	0.327934	0.003044	0.025116	0.011135	321.413	0.001129	0.050639
40	S-18	Site Preparation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
41	S-19	Below-Grade Construction	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
42	S-19	Below-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
43	S-19	Below-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
44	S-19	Below-Grade Construction	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0.0486	1.171546	0.655867	0.006087	0.050233	0.02227	642.8259	0.002257	0.101277
45	S-19	Below-Grade Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
46	S-19	Below-Grade Construction	Tool - Van/Conex 20'	Diesel	0	1	2027	2	25	50	98	49	1	passenger	0.018458	0.076812	0.135131	0.000375	0.016009	0.014065	39.61429	0.000857	0.006241
47	S-20	Above-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
48	S-20	Above-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
49	S-20	Above-Grade Construction	Welding Truck	Diesel	250	2	2027	4	25	100	98	98	2	passenger	0.036915	0.153624	0.270262	0.000751	0.032018	0.02813	79.22858	0.001715	0.012482
50	S-21	Commissioning and Testing	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
51	S-21	Commissioning and Testing	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
52	S-21	Commissioning and Testing	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
53	S-21	Commissioning and Testing	Tool - Van/Conex 20'	Diesel	0	3	2027	6	25	150	98	147	3	passenger	0.055373	0.230435	0.405393	0.001126	0.048028	0.042195	118.8429	0.002572	0.018724
54	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
55	S-22	Site & ROW Restoration (overhead)	Dump Truck	Diesel	415	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
56	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
57	S-22	Site & ROW Restoration (overhead)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
58	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
59	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0.002664	0.137475	0.024485	0.00122	0.007386	0.003091	128.8203	0.000124	0.020296
60	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0.018458	0.076812	0.135131	0.000375	0.016009	0.014065	39.61429	0.000857	0.006241
61	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
62	S-23	Site & ROW Restoration (underground)	Dump Truck	Diesel	415	0	2027	0	25	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
63	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
64	S-23	Site & ROW Restoration (underground)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
65	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
66	S-23	Site & ROW Restoration (underground)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0.002664	0.137475	0.024485	0.00122	0.007386	0.003091	128.8203	0.000124	0.020296
67	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0.018458	0.076812	0.135131	0.000375	0.016009	0.014065	39.61429	0.000857	0.006241
68	S-01	Survey and Staking	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
69	S-02	Utility Locates	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
70	S-03	Mobilization	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0.141555	0.183815	2.291879	0.006325	0.036359	0.013352	639.81	0.014131	0.015671
71	S-04	Access Road Construction	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0.141555	0.183815	2.291879	0.006325	0.036359	0.013352	639.81	0.014131	0.015671
72	S-05	Conventional Structure Foundation Installation	Worker Commute	Gasoline	NA	19	2027	38	40	1520	99	1504.8	15.2	passenger	0.244504	0.317499	3.9587	0.010925	0.062802	0.023063	1105.126	0.024408	0.027069
73	S-06	Conventional Structure Installation	Worker Commute	Gasoline	NA	12	2027	24	40	960	99	950.4	9.6	passenger	0.154424	0.200526	2.500232	0.0069	0.039664	0.014566	697.9745	0.015416	0.017096
74	S-07	Helicopter Support	Worker Commute	Gasoline	NA	14	2027	28	40	1120	99	1108.8	11.2	passenger	0.180161	0.233947	2.916937	0.00805	0.046275	0.016994	814.3036	0.017985	0.019945
75	S-08	Helicopter Landing Pad Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
76	S-09	Helicopter Landing Platform Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
77	S-10	Helicopter Site Preparation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
78	S-11	Helicopter Structure Foundation Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
79	S-12	Helicopter Structure Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
80	S-13	Conductor Installation	Worker Commute	Gasoline	NA	16	2027	32	40	1280	99	1267.2	12.8	passenger	0.205898	0.267368	3.333642	0.0092	0.052886	0.019421	930.6327	0.020555	0.022795
81	S-14	Excavate Trench	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0.115818	0.150394	1.875174	0.005175	0.029748	0.010924	523.4809	0.011562	0.012822
82	S-15	Duct Bank & Conduit Installation	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0.09008	0.116973	1.458468	0.004025	0.023138	0.008497	407.1518	0.008993	0.009973
83	S-16	Cable Installation	Worker Commute	Gasoline	NA	6	2027	12	40	480	99	475.2	4.8	passenger	0.077212	0.100263	1.250116	0.00345	0.019832	0.007283	348.9873	0.007708	0.008548
84	S-17	Paving	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0.102949	0.133684	1.666821	0.0046	0.026443	0.009711	465.3163	0.010277	0.011397
85	S-18	Site Preparation	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0.102949	0.133684	1.666821	0.0046	0.026443	0.009711	465.3163	0.010277	0.011397
86	S-19	Below-Grade Construction	Worker Commute	Gasoline	NA	21	2027	42	40	1680	99	1663.2	16.8	passenger	0.270241	0.35092	4.375405	0.012075	0.069413	0.02549	1221.455	0.026978	0.029918
87	S-20	Above-Grade Construction	Worker Commute	Gasoline	NA	22	2027	44	40	1760	99	1742.4	17.6	passenger	0.28311	0.367631	4.583758	0.01265	0.072718	0.026704	1279.62	0.028262	0.031343
88	S-21	Commissioning and Testing	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0.09008	0.116973	1.458468	0.004025	0.023138	0.008497	407.1518	0.008993	0.009973
89	S-22	Site & ROW Restoration (overhead)	Worker Commute	Gasoline	NA	10	2027	20	40	800	99	792	8	passenger	0.128686	0.167105	2.083526	0.00575	0.033054	0.012138	581.6454	0.012847	0.014247
90	S-23	Site & ROW Restoration (underground)	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0.115818	0.150394	1.875174	0.005175	0.029748	0.010924	523.4809	0.011562	0.012822

Table 22: On-Road Uncontrolled Exhaust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	1052	0.012003	0.01154	0.143821	0.000379427	0.002177	0.000801917	38.38015	0.000989362	0.000998334
2	S-02	1052	0.012782	0.308117	0.172493	0.001600928	0.013211	0.005857113	169.0632	0.000593679	0.026635979
3	S-02	1052	0.019417	0.080806	0.142158	0.000394885	0.016842	0.014796212	41.67423	0.000901902	0.006565792
4	S-03	47	0.000286	0.006883	0.003853	3.57622E-05	0.000295	0.000130839	3.776602	1.32619E-05	0.000595005
5	S-03	47	0.000868	0.00361	0.006351	1.76422E-05	0.000752	0.000661047	1.861872	4.02941E-05	0.000293339
6	S-03	47	0.001735	0.00722	0.012702	3.52844E-05	0.001505	0.001322095	3.723743	8.05882E-05	0.000586677
7	S-03	47	0.000571	0.013766	0.007706	7.15243E-05	0.00059	0.000261677	7.553205	2.65237E-05	0.00119001
8	S-03	47	0.000587	0.015585	0.007778	8.67225E-05	0.000737	0.000326396	9.158177	2.72563E-05	0.001442875
9	S-04	203	0.002316	0.002227	0.027753	7.32164E-05	0.00042	0.000154743	7.406056	0.000190913	0.000192644
10	S-04	203	0.007494	0.031186	0.054863	0.000152398	0.0065	0.005710325	16.0834	0.000348072	0.002533946
11	S-04	203	0.003802	0.100971	0.050394	0.000561851	0.004775	0.002114628	59.3333	0.000176586	0.009347985
12	S-04	203	0.002535	0.067314	0.033596	0.000374567	0.003183	0.001409752	39.55553	0.000117724	0.00623199
13	S-05	303	0.007363	0.177489	0.099364	0.000922207	0.00761	0.003373965	97.38813	0.000341986	0.015343539
14	S-05	303	0.011185	0.046548	0.081889	0.000227472	0.009702	0.008523293	24.00626	0.000519537	0.003782196
15	S-05	303	0.003783	0.100474	0.050146	0.000559083	0.004752	0.002104211	59.04101	0.000175716	0.009301936
16	S-05	303	0.005675	0.150711	0.075219	0.000838625	0.007128	0.003156317	88.56152	0.000263574	0.013952904
17	S-06	252	0.00575	0.005529	0.068903	0.000181779	0.001043	0.000384188	18.38745	0.000473991	0.000478289
18	S-06	252	0.009303	0.038713	0.068106	0.000189184	0.008069	0.007088679	19.9656	0.00043209	0.003145589
19	S-06	252	0.003146	0.083562	0.041706	0.00046498	0.003952	0.001750037	49.10342	0.00014614	0.007736263
20	S-10	203	0.000225	0.011786	0.002291	9.99027E-05	0.0006	0.000251611	10.55005	1.04442E-05	0.001662165
21	S-07	239	0.000265	0.013876	0.002697	0.000117619	0.000707	0.000296231	12.421	1.22964E-05	0.001956933
22	S-13	76	0	0	0	0	0	0	0	0	0
23	S-13	76	0.001734	0.001667	0.02078	5.48221E-05	0.000315	0.000115866	5.545421	0.00014295	0.000144246
24	S-13	76	0.002806	0.011675	0.02054	5.70556E-05	0.002433	0.002137856	6.021372	0.000130313	0.00094867
25	S-13	76	0.000949	0.025201	0.012578	0.000140232	0.001192	0.000527789	14.80897	4.40739E-05	0.002333159
26	S-14	201	0.001221	0.029435	0.016479	0.00015294	0.001262	0.000559544	16.151	5.67156E-05	0.002544597
27	S-14	201	0.004452	0.018527	0.032594	9.05382E-05	0.003861	0.003392439	9.554967	0.000206786	0.001505389
28	S-14	201	0.00742	0.030878	0.054323	0.000150897	0.006436	0.005654066	15.92494	0.000344643	0.002508981
29	S-14	201	0.003764	0.099976	0.049898	0.000556315	0.004728	0.002093794	58.74873	0.000174846	0.009255886
30	S-14	201	0.001255	0.033325	0.016633	0.000185438	0.001576	0.000697931	19.58291	5.8282E-05	0.003085295
31	S-15	199	0.001209	0.029142	0.016315	0.000151419	0.00125	0.000553976	15.99029	5.61512E-05	0.002519277
32	S-15	199	0.007346	0.030571	0.053782	0.000149395	0.006372	0.005597806	15.76649	0.000341214	0.002484016
33	S-15	199	0.001242	0.032994	0.016467	0.000183593	0.00156	0.000690987	19.38806	5.77021E-05	0.003054596
34	S-17	201	0.006105	0.147175	0.082393	0.000764702	0.00631	0.002797718	80.75501	0.000283578	0.012722984
35	S-17	201	0.001221	0.029435	0.016479	0.00015294	0.001262	0.000559544	16.151	5.67156E-05	0.002544597
36	S-17	201	0.00742	0.030878	0.054323	0.000150897	0.006436	0.005654066	15.92494	0.000344643	0.002508981
37	S-18	78	0	0	0	0	0	0	0	0	0
38	S-18	78	0.002879	0.011983	0.02108	5.8557E-05	0.002497	0.002194115	6.179829	0.000133742	0.000973635
39	S-18	78	0.000948	0.022845	0.012789	0.0001187	0.00098	0.000434273	12.53511	4.40181E-05	0.001974911
40	S-18	78	0.000487	0.012932	0.006454	7.19612E-05	0.000612	0.000270839	7.599338	2.26169E-05	0.001197279
41	S-19	300	0.001873	0.04974	0.024825	0.000276774	0.002352	0.001041689	29.22822	8.6988E-05	0.004604919
42	S-19	300	0.006846	0.006582	0.082027	0.000216403	0.001242	0.000457367	21.88982	0.000564275	0.000569392
43	S-19	300	0.011075	0.046087	0.081079	0.000225219	0.009606	0.008438904	23.76857	0.000514393	0.003744748
44	S-19	300	0.00729	0.175732	0.09838	0.000913077	0.007535	0.003340559	96.42389	0.0003386	0.015191623
45	S-19	300	0.005618	0.149219	0.074474	0.000830321	0.007057	0.003125066	87.68467	0.000260964	0.013814756
46	S-19	300	0.002769	0.011522	0.02027	5.63048E-05	0.002401	0.002109726	5.942143	0.000128598	0.000936187
47	S-20	903	0.020606	0.019812	0.246902	0.000651374	0.003738	0.001376675	65.88836	0.001698468	0.00171387
48	S-20	903	0.033334	0.138722	0.244047	0.00067791	0.028913	0.025401101	71.54341	0.001548322	0.011271693
49	S-20	903	0.016667	0.069361	0.122023	0.000338955	0.014456	0.012700551	35.7717	0.000774161	0.005635846
50	S-21	253	0.005773	0.005551	0.069176	0.0001825	0.001047	0.000385713	18.46042	0.000475872	0.000480187
51	S-21	253	0.00934	0.038867	0.068376	0.000189935	0.008101	0.007116809	20.04483	0.000433804	0.003158071
52	S-21	253	0.001579	0.041947	0.020936	0.000233413	0.001984	0.000878491	24.64914	7.33599E-05	0.003883481
53	S-21	253	0.007005	0.02915	0.051282	0.000142451	0.006075	0.005337607	15.03362	0.000325353	0.002368553
54	S-22	127	0.002898	0.002786	0.034725	9.16107E-05	0.000526	0.000193619	9.266691	0.000238876	0.000241043
55	S-22	127	0.001586	0.042113	0.021018	0.000234335	0.001992	0.000881963	24.74656	7.36499E-05	0.003898831
56	S-22	127	0.001586	0.042113	0.021018	0.000234335	0.001992	0.000881963	24.74656	7.36499E-05	0.003898831
57	S-22	127	0.000793	0.021056	0.010509	0.000117168	0.000996	0.000440982	12.37328	3.68249E-05	0.001949416
58	S-22	127	0.000793	0.021056	0.010509	0.000117168	0.000996	0.000440982	12.37328	3.68249E-05	0.001949416
59	S-22	127	0.000169	0.00873	0.001555	7.74606E-05	0.000469	0.000196277	8.180092	7.85595E-06	0.001288777
60	S-22	127	0.001172	0.004878	0.008581	2.38357E-05	0.001017	0.000893117	2.515507	5.44399E-05	0.000396319
61	S-23	98	0.002236	0.00215	0.026796	7.06917E-05	0.000406	0.000149407	7.150675	0.00018433	0.000186001
62	S-23	98	0	0	0	0	0	0	0	0	0
63	S-23	98	0.001224	0.032496	0.016219	0.000180826	0.001537	0.00068057	19.09577	5.68322E-05	0.003008547
64	S-23	98	0.000612	0.016248	0.008109	9.04128E-05	0.000768	0.000340285	9.547887	2.84161E-05	0.001504273
65	S-23	98	0.000612	0.016248	0.008109	9.04128E-05	0.000768	0.000340285	9.547887	2.84161E-05	0.001504273
66	S-23	98	0.000131	0.006736	0.0012	5.97727E-05	0.000362	0.000151458	6.312197	6.06207E-06	0.000994489
67	S-23	98	0.000904	0.003764	0.006621	1.83929E-05	0.000784	0.000689177	1.9411	4.20087E-05	0.000305821
68	S-01	1052	0.033844	0.043949	0.547967	0.001512291	0.008693	0.003192356	152.9727	0.003378646	0.003746859
69	S-02	1052	0.033844	0.043949	0.547967	0.001512291	0.008693	0.003192356	152.9727	0.003378646	0.003746859
70	S-03	47	0.003327	0.00432	0.053859	0.000148642	0.000854	0.000313773	15.03553	0.000332084	0.000368275
71	S-04	203	0.014368	0.018657	0.232626	0.000642005	0.00369	0.001355234	64.94071	0.001434319	0.001590634
72	S-05	303	0.037042	0.048101	0.599743	0.001655183	0.009515	0.003493991	167.4266	0.003697883	0.004100887
73	S-06	252	0.019457	0.025266	0.315029	0.000869424	0.004998	0.001835301	87.94479	0.0019424	0.002154088
74	S-07	239	0.021529	0.027957	0.348574	0.000962001	0.00553	0.002030727	97.30928	0.00214923	0.002383458
75	S-08	203	0.006531	0.008481	0.105739	0.00029182	0.001677	0.000616015	29.51851	0.000651963	0.000723016
76	S-09	203	0.006531	0.008481	0.105739	0.00029182	0.001677	0.000616015	29.51851	0.000651963	0.000723016
77	S-10	203	0.006531	0.008481	0.105739	0.00029182	0.001677	0.000616015	29.51851	0.000651963	0.000723016
78	S-11	216	0.006949	0.009024	0.11251	0.000310508	0.001785	0.000655465	31.40885	0.000693714	0.000769317
79	S-12	164	0.005276	0.006851	0.085425	0.000235756	0.001355	0.000497668	23.84746	0.000526709	0.000584111
80	S-13	76	0.007824	0.01016	0.126678	0.00034961	0.00201	0.000738005	35.36404	0.000781071	0.000866194
81	S-14	201	0.01164	0.015115	0.188455	0.000520102	0.00299	0.001097903	52.60983	0.001161972	0.001288606
82	S-15	199	0.008963	0.011639	0.145118	0.000400498	0.002302	0.000845428	40.5116	0.000894763	0.000992277
83	S-16	227	0.008764	0.01138	0.141888	0.000391586	0.002251	0.000826614	39.61005	0.000874851	0.000970194
84	S-17	201	0.010346	0.013435	0.167516	0.000462313	0.002658	0.000975914	46.76429	0.001032864	0.001145428
85	S-18	78	0.004015	0.005214	0.065006	0.000179405	0.001031	0.000378713	18.14734	0.000400813	0.000444494
86	S-19	300	0.040536	0.052638	0.656311	0.0018113	0.010412	0.003823544	183.2183	0.004046668	0.004487683
87	S-20	903	0.127824	0.165985	2.069567	0.005711631	0.032832	0.012056909	577.7484	0.012760492	0.014151159
88	S-21	253	0.011395	0.014797	0.184496	0.000509176	0.002927	0.001074841	51.5047	0.001137563	0.001261537
89	S-22	127	0.008172	0.010611	0.132304	0.000365135	0.002099	0.000770778	36.93448	0.000815757	0.00090466
90	S-23	98	0.005675	0.007369	0.091884	0.000253582	0.001458	0.000535296	25.65056	0.000566533	0.000628276

Table 23: On-Road Controlled Daily Exhaust Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	HP	Quantity	Year	Trips/Day	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	Survey and Staking	Pickup - 1/2 Ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0.022819	0.02194	0.273424	0.000721	0.00414	0.001525	72.96607	0.001881	0.001898
2	S-02	Utility Locates	Flatbed truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0.0243	0.585773	0.327934	0.003044	0.025116	0.011135	321.413	0.001129	0.050639
3	S-02	Utility Locates	Pickup - 1 Ton	Diesel	410	2	2027	4	25	100	98	98	2	passenger	0.036915	0.153624	0.270262	0.000751	0.032018	0.02813	79.22858	0.001715	0.012482
4	S-03	Mobilization	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
5	S-03	Mobilization	Gang truck	Diesel	350	2	2027	4	25	100	98	98	2	passenger	0.036915	0.153624	0.270262	0.000751	0.032018	0.02813	79.22858	0.001715	0.012482
6	S-03	Mobilization	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
7	S-03	Mobilization	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0.0243	0.585773	0.327934	0.003044	0.025116	0.011135	321.413	0.001129	0.050639
8	S-03	Mobilization	Water truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
9	S-04	Access Road Construction	Pickup - 1/2 ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0.022819	0.02194	0.273424	0.000721	0.00414	0.001525	72.96607	0.001881	0.001898
10	S-04	Access Road Construction	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
11	S-04	Access Road Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
12	S-04	Access Road Construction	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
13	S-05	Conventional Structure Foundation Installation	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0.0486	1.171546	0.655867	0.006087	0.050233	0.02227	642.8259	0.002257	0.101277
14	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
15	S-05	Conventional Structure Foundation Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
16	S-05	Conventional Structure Foundation Installation	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
17	S-06	Conventional Structure Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
18	S-06	Conventional Structure Installation	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
19	S-06	Conventional Structure Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
20	S-10	Helicopter Site Preparation	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0.002215	0.116117	0.022567	0.000984	0.005915	0.002479	103.9414	0.000103	0.016376
21	S-07	Helicopter Support	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0.002215	0.116117	0.022567	0.000984	0.005915	0.002479	103.9414	0.000103	0.016376
22	S-13	Conductor Installation	Jet Fuel Truck	Diesel	300	0	2027	0	20	0	98	0	0	vendor	0	0	0	0	0	0	0	0	0
23	S-13	Conductor Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
24	S-13	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
25	S-13	Conductor Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
26	S-14	Excavate Trench	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
27	S-14	Excavate Trench	Foreman Truck	Diesel	300	3	2027	6	20	120	99	118.8	1.2	passenger	0.044298	0.184348	0.324315	0.000901	0.038422	0.033756	95.07429	0.002058	0.014979
28	S-14	Excavate Trench	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
29	S-14	Excavate Trench	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
30	S-14	Excavate Trench	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
31	S-15	Duct Bank & Conduit Installation	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
32	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
33	S-15	Duct Bank & Conduit Installation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
34	S-17	Paving	Concrete Truck	Diesel	425	5	2027	10	20	200	98	196	4	hhdt	0.06075	1.464432	0.819834	0.007609	0.062791	0.027838	803.5324	0.002822	0.126597
35	S-17	Paving	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0.01215	0.292886	0.163967	0.001522	0.012558	0.005568	160.7065	0.000564	0.025319
36	S-17	Paving	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
37	S-18	Site Preparation	Flatbed truck	Diesel	350	0	2027	0	20	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
38	S-18	Site Preparation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
39	S-18	Site Preparation	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0.0243	0.585773	0.327934	0.003044	0.025116	0.011135	321.413	0.001129	0.050639
40	S-18	Site Preparation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
41	S-19	Below-Grade Construction	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
42	S-19	Below-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
43	S-19	Below-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
44	S-19	Below-Grade Construction	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0.0486	1.171546	0.655867	0.006087	0.050233	0.02227	642.8259	0.002257	0.101277
45	S-19	Below-Grade Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0.037457	0.99479	0.496495	0.005535	0.047046	0.020834	584.5645	0.00174	0.092098
46	S-19	Below-Grade Construction	Tool - Van/Conex 20'	Diesel	0	1	2027	2	25	50	98	49	1	passenger	0.018458	0.076812	0.135131	0.000375	0.016009	0.014065	39.61429	0.000857	0.006241
47	S-20	Above-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
48	S-20	Above-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
49	S-20	Above-Grade Construction	Welding Truck	Diesel	250	2	2027	4	25	100	98	98	2	passenger	0.036915	0.153624	0.270262	0.000751	0.032018	0.02813	79.22858	0.001715	0.012482
50	S-21	Commissioning and Testing	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
51	S-21	Commissioning and Testing	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0.07383	0.307247	0.540524	0.001501	0.064037	0.056259	158.4572	0.003429	0.024965
52	S-21	Commissioning and Testing	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
53	S-21	Commissioning and Testing	Tool - Van/Conex 20'	Diesel	0	3	2027	6	25	150	98	147	3	passenger	0.055373	0.230435	0.405393	0.001126	0.048028	0.042195	118.8429	0.002572	0.018724
54	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
55	S-22	Site & ROW Restoration (overhead)	Dump Truck	Diesel	415	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
56	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
57	S-22	Site & ROW Restoration (overhead)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
58	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
59	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0.002664	0.137475	0.024485	0.00122	0.007386	0.003091	128.8203	0.000124	0.020296
60	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0.018458	0.076812	0.135131	0.000375	0.016009	0.014065	39.61429	0.000857	0.006241
61	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0.045639	0.04388	0.546848	0.001443	0.008279	0.003049	145.9321	0.003762	0.003796
62	S-23	Site & ROW Restoration (underground)	Dump Truck	Diesel	415	0	2027	0	25	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
63	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0.024971	0.663194	0.330997	0.00369	0.031364	0.013889	389.7097	0.00116	0.061399
64	S-23	Site & ROW Restoration (underground)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
65	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0.012486	0.331597	0.165498	0.001845	0.015682	0.006945	194.8548	0.00058	0.030699
66	S-23	Site & ROW Restoration (underground)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0.002664	0.137475	0.024485	0.00122	0.007386	0.003091	128.8203	0.000124	0.020296
67	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0.018458	0.076812	0.135131	0.000375	0.016009	0.014065	39.61429	0.000857	0.006241
68	S-01	Survey and Staking	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
69	S-02	Utility Locates	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
70	S-03	Mobilization	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0.141555	0.183815	2.291879	0.006325	0.036359	0.013352	639.81	0.014131	0.015671
71	S-04	Access Road Construction	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0.141555	0.183815	2.291879	0.006325	0.036359	0.013352	639.81	0.014131	0.015671
72	S-05	Conventional Structure Foundation Installation	Worker Commute	Gasoline	NA	19	2027	38	40	1520	99	1504.8	15.2	passenger	0.244504	0.317499	3.9587	0.010925	0.062802	0.023063	1105.126	0.024408	0.027069
73	S-06	Conventional Structure Installation	Worker Commute	Gasoline	NA	12	2027	24	40	960	99	950.4	9.6	passenger	0.154424	0.200526	2.500232	0.0069	0.039664	0.014566	697.9745	0.015416	0.017096
74	S-07	Helicopter Support	Worker Commute	Gasoline	NA	14	2027	28	40	1120	99	1108.8	11.2	passenger	0.180161	0.233947	2.916937	0.00805	0.046275	0.016994	814.3036	0.017985	0.019945
75	S-08	Helicopter Landing Pad Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
76	S-09	Helicopter Landing Platform Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
77	S-10	Helicopter Site Preparation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
78	S-11	Helicopter Structure Foundation Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
79	S-12	Helicopter Structure Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0.064343	0.083552	1.041763	0.002875	0.016527	0.006069	290.8227	0.006423	0.007123
80	S-13	Conductor Installation	Worker Commute	Gasoline	NA	16	2027	32	40	1280	99	1267.2	12.8	passenger	0.205898	0.267368	3.333642	0.0092	0.052886	0.019421	930.6327	0.020555	0.022795
81	S-14	Excavate Trench	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0.115818	0.150394	1.875174	0.005175	0.029748	0.010924	523.4809	0.011562	0.012822
82	S-15	Duct Bank & Conduit Installation	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0.09008	0.116973	1.458468	0.004025	0.023138	0.008497	407.1518	0.008993	0.009973
83	S-16	Cable Installation	Worker Commute	Gasoline	NA	6	2027	12	40	480	99	475.2	4.8	passenger	0.077212	0.100263	1.250116	0.00345	0.019832	0.007283	348.9873	0.007708	0.008548
84	S-17	Paving	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0.102949	0.133684	1.666821	0.0046	0.026443	0.009711	465.3163	0.010277	0.011397
85	S-18	Site Preparation	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0.102949	0.133684	1.666821	0.0046	0.026443	0.009711	465.3163	0.010277	0.011397
86	S-19	Below-Grade Construction	Worker Commute	Gasoline	NA	21	2027	42	40	1680	99	1663.2	16.8	passenger	0.270241	0.35092	4.375405	0.012075	0.069413	0.02549	1221.455	0.026978	0.029918
87	S-20	Above-Grade Construction	Worker Commute	Gasoline	NA	22	2027	44	40	1760	99	1742.4	17.6	passenger	0.28311	0.367631	4.583758	0.01265	0.072718	0.026704	1279.62	0.028262	0.031343
88	S-21	Commissioning and Testing	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0.09008	0.116973	1.458468	0.004025	0.023138	0.008497	407.1518	0.008993	0.009973
89	S-22	Site & ROW Restoration (overhead)	Worker Commute	Gasoline	NA	10	2027	20	40	800	99	792	8	passenger	0.128686	0.167105	2.083526	0.00575	0.033054	0.012138	581.6454	0.012847	0.014247
90	S-23	Site & ROW Restoration (underground)	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0.115818	0.150394	1.875174	0.005175	0.029748	0.010924	523.4809	0.011562	0.012822

Table 24: On-Road Controlled Exhaust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	1052	0.012003	0.01154	0.143821	0.000379427	0.002177	0.000801917	38.38015	0.000989362	0.000998334
2	S-02	1052	0.012782	0.308117	0.172493	0.001600928	0.013211	0.005857113	169.0632	0.000593679	0.026635979
3	S-02	1052	0.019417	0.080806	0.142158	0.000394885	0.016842	0.014796212	41.67423	0.000901902	0.006565792
4	S-03	47	0.000286	0.006883	0.003853	3.57622E-05	0.000295	0.000130839	3.776602	1.32619E-05	0.000595005
5	S-03	47	0.000868	0.00361	0.006351	1.76422E-05	0.000752	0.000661047	1.861872	4.02941E-05	0.000293339
6	S-03	47	0.001735	0.00722	0.012702	3.52844E-05	0.001505	0.001322095	3.723743	8.05882E-05	0.000586677
7	S-03	47	0.000571	0.013766	0.007706	7.15243E-05	0.00059	0.000261677	7.553205	2.65237E-05	0.00119001
8	S-03	47	0.000587	0.015585	0.007778	8.67225E-05	0.000737	0.000326396	9.158177	2.72563E-05	0.001442875
9	S-04	203	0.002316	0.002227	0.027753	7.32164E-05	0.00042	0.000154743	7.406056	0.000190913	0.000192644
10	S-04	203	0.007494	0.031186	0.054863	0.000152398	0.0065	0.005710325	16.0834	0.000348072	0.002533946
11	S-04	203	0.003802	0.100971	0.050394	0.000561851	0.004775	0.002114628	59.3333	0.000176586	0.009347985
12	S-04	203	0.002535	0.067314	0.033596	0.000374567	0.003183	0.001409752	39.55553	0.000117724	0.00623199
13	S-05	303	0.007363	0.177489	0.099364	0.000922207	0.00761	0.003373965	97.38813	0.000341986	0.015343539
14	S-05	303	0.011185	0.046548	0.081889	0.000227472	0.009702	0.008523293	24.00626	0.000519537	0.003782196
15	S-05	303	0.003783	0.100474	0.050146	0.000559083	0.004752	0.002104211	59.04101	0.000175716	0.009301936
16	S-05	303	0.005675	0.150711	0.075219	0.000838625	0.007128	0.003156317	88.56152	0.000263574	0.013952904
17	S-06	252	0.00575	0.005529	0.068903	0.000181779	0.001043	0.000384188	18.38745	0.000473991	0.000478289
18	S-06	252	0.009303	0.038713	0.068106	0.000189184	0.008069	0.007088679	19.9656	0.00043209	0.003145589
19	S-06	252	0.003146	0.083562	0.041706	0.00046498	0.003952	0.001750037	49.10342	0.00014614	0.007736263
20	S-10	203	0.000225	0.011786	0.002291	9.99027E-05	0.0006	0.000251611	10.55005	1.04442E-05	0.001662165
21	S-07	239	0.000265	0.013876	0.002697	0.000117619	0.000707	0.000296231	12.421	1.22964E-05	0.001956933
22	S-13	76	0	0	0	0	0	0	0	0	0
23	S-13	76	0.001734	0.001667	0.02078	5.48221E-05	0.000315	0.000115866	5.545421	0.00014295	0.000144246
24	S-13	76	0.002806	0.011675	0.02054	5.70556E-05	0.002433	0.002137856	6.021372	0.000130313	0.00094867
25	S-13	76	0.000949	0.025201	0.012578	0.000140232	0.001192	0.000527789	14.80897	4.40739E-05	0.002333159
26	S-14	201	0.001221	0.029435	0.016479	0.00015294	0.001262	0.000559544	16.151	5.67156E-05	0.002544597
27	S-14	201	0.004452	0.018527	0.032594	9.05382E-05	0.003861	0.003392439	9.554967	0.000206786	0.001505389
28	S-14	201	0.00742	0.030878	0.054323	0.000150897	0.006436	0.005654066	15.92494	0.000344643	0.002508981
29	S-14	201	0.003764	0.099976	0.049898	0.000556315	0.004728	0.002093794	58.74873	0.000174846	0.009255886
30	S-14	201	0.001255	0.033325	0.016633	0.000185438	0.001576	0.000697931	19.58291	5.8282E-05	0.003085295
31	S-15	199	0.001209	0.029142	0.016315	0.000151419	0.00125	0.000553976	15.99029	5.61512E-05	0.002519277
32	S-15	199	0.007346	0.030571	0.053782	0.000149395	0.006372	0.005597806	15.76649	0.000341214	0.002484016
33	S-15	199	0.001242	0.032994	0.016467	0.000183593	0.00156	0.000690987	19.38806	5.77021E-05	0.003054596
34	S-17	201	0.006105	0.147175	0.082393	0.000764702	0.00631	0.002797718	80.75501	0.000283578	0.012722984
35	S-17	201	0.001221	0.029435	0.016479	0.00015294	0.001262	0.000559544	16.151	5.67156E-05	0.002544597
36	S-17	201	0.00742	0.030878	0.054323	0.000150897	0.006436	0.005654066	15.92494	0.000344643	0.002508981
37	S-18	78	0	0	0	0	0	0	0	0	0
38	S-18	78	0.002879	0.011983	0.02108	5.8557E-05	0.002497	0.002194115	6.179829	0.000133742	0.000973635
39	S-18	78	0.000948	0.022845	0.012789	0.0001187	0.00098	0.000434273	12.53511	4.40181E-05	0.001974911
40	S-18	78	0.000487	0.012932	0.006454	7.19612E-05	0.000612	0.000270839	7.599338	2.26169E-05	0.001197279
41	S-19	300	0.001873	0.04974	0.024825	0.000276774	0.002352	0.001041689	29.22822	8.6988E-05	0.004604919
42	S-19	300	0.006846	0.006582	0.082027	0.000216403	0.001242	0.000457367	21.88982	0.000564275	0.000569392
43	S-19	300	0.011075	0.046087	0.081079	0.000225219	0.009606	0.008438904	23.76857	0.000514393	0.003744748
44	S-19	300	0.00729	0.175732	0.09838	0.000913077	0.007535	0.003340559	96.42389	0.0003386	0.015191623
45	S-19	300	0.005618	0.149219	0.074474	0.000830321	0.007057	0.003125066	87.68467	0.000260964	0.013814756
46	S-19	300	0.002769	0.011522	0.02027	5.63048E-05	0.002401	0.002109726	5.942143	0.000128598	0.000936187
47	S-20	903	0.020606	0.019812	0.246902	0.000651374	0.003738	0.001376675	65.88836	0.001698468	0.00171387
48	S-20	903	0.033334	0.138722	0.244047	0.00067791	0.028913	0.025401101	71.54341	0.001548322	0.011271693
49	S-20	903	0.016667	0.069361	0.122023	0.000338955	0.014456	0.012700551	35.7717	0.000774161	0.005635846
50	S-21	253	0.005773	0.005551	0.069176	0.0001825	0.001047	0.000385713	18.46042	0.000475872	0.000480187
51	S-21	253	0.00934	0.038867	0.068376	0.000189935	0.008101	0.007116809	20.04483	0.000433804	0.003158071
52	S-21	253	0.001579	0.041947	0.020936	0.000233413	0.001984	0.000878491	24.64914	7.33599E-05	0.003883481
53	S-21	253	0.007005	0.02915	0.051282	0.000142451	0.006075	0.005337607	15.03362	0.000325353	0.002368553
54	S-22	127	0.002898	0.002786	0.034725	9.16107E-05	0.000526	0.000193619	9.266691	0.000238876	0.000241043
55	S-22	127	0.001586	0.042113	0.021018	0.000234335	0.001992	0.000881963	24.74656	7.36499E-05	0.003898831
56	S-22	127	0.001586	0.042113	0.021018	0.000234335	0.001992	0.000881963	24.74656	7.36499E-05	0.003898831
57	S-22	127	0.000793	0.021056	0.010509	0.000117168	0.000996	0.000440982	12.37328	3.68249E-05	0.001949416
58	S-22	127	0.000793	0.021056	0.010509	0.000117168	0.000996	0.000440982	12.37328	3.68249E-05	0.001949416
59	S-22	127	0.000169	0.00873	0.001555	7.74606E-05	0.000469	0.000196277	8.180092	7.85595E-06	0.001288777
60	S-22	127	0.001172	0.004878	0.008581	2.38357E-05	0.001017	0.000893117	2.515507	5.44399E-05	0.000396319
61	S-23	98	0.002236	0.00215	0.026796	7.06917E-05	0.000406	0.000149407	7.150675	0.00018433	0.000186001
62	S-23	98	0	0	0	0	0	0	0	0	0
63	S-23	98	0.001224	0.032496	0.016219	0.000180826	0.001537	0.00068057	19.09577	5.68322E-05	0.003008547
64	S-23	98	0.000612	0.016248	0.008109	9.04128E-05	0.000768	0.000340285	9.547887	2.84161E-05	0.001504273
65	S-23	98	0.000612	0.016248	0.008109	9.04128E-05	0.000768	0.000340285	9.547887	2.84161E-05	0.001504273
66	S-23	98	0.000131	0.006736	0.0012	5.97727E-05	0.000362	0.000151458	6.312197	6.06207E-06	0.000994489
67	S-23	98	0.000904	0.003764	0.006621	1.83929E-05	0.000784	0.000689177	1.9411	4.20087E-05	0.000305821
68	S-01	1052	0.033844	0.043949	0.547967	0.001512291	0.008693	0.003192356	152.9727	0.003378646	0.003746859
69	S-02	1052	0.033844	0.043949	0.547967	0.001512291	0.008693	0.003192356	152.9727	0.003378646	0.003746859
70	S-03	47	0.003327	0.00432	0.053859	0.000148642	0.000854	0.000313773	15.03553	0.000332084	0.000368275
71	S-04	203	0.014368	0.018657	0.232626	0.000642005	0.00369	0.001355234	64.94071	0.001434319	0.001590634
72	S-05	303	0.037042	0.048101	0.599743	0.001655183	0.009515	0.003493991	167.4266	0.003697883	0.004100887
73	S-06	252	0.019457	0.025266	0.315029	0.000869424	0.004998	0.001835301	87.94479	0.0019424	0.002154088
74	S-07	239	0.021529	0.027957	0.348574	0.000962001	0.00553	0.002030727	97.30928	0.00214923	0.002383458
75	S-08	203	0.006531	0.008481	0.105739	0.00029182	0.001677	0.000616015	29.51851	0.000651963	0.000723016
76	S-09	203	0.006531	0.008481	0.105739	0.00029182	0.001677	0.000616015	29.51851	0.000651963	0.000723016
77	S-10	203	0.006531	0.008481	0.105739	0.00029182	0.001677	0.000616015	29.51851	0.000651963	0.000723016
78	S-11	216	0.006949	0.009024	0.11251	0.000310508	0.001785	0.000655465	31.40885	0.000693714	0.000769317
79	S-12	164	0.005276	0.006851	0.085425	0.000235756	0.001355	0.000497668	23.84746	0.000526709	0.000584111
80	S-13	76	0.007824	0.01016	0.126678	0.00034961	0.00201	0.000738005	35.36404	0.000781071	0.000866194
81	S-14	201	0.01164	0.015115	0.188455	0.000520102	0.00299	0.001097903	52.60983	0.001161972	0.001288606
82	S-15	199	0.008963	0.011639	0.145118	0.000400498	0.002302	0.000845428	40.5116	0.000894763	0.000992277
83	S-16	227	0.008764	0.01138	0.141888	0.000391586	0.002251	0.000826614	39.61005	0.000874851	0.000970194
84	S-17	201	0.010346	0.013435	0.167516	0.000462313	0.002658	0.000975914	46.76429	0.001032864	0.001145428
85	S-18	78	0.004015	0.005214	0.065006	0.000179405	0.001031	0.000378713	18.14734	0.000400813	0.000444494
86	S-19	300	0.040536	0.052638	0.656311	0.0018113	0.010412	0.003823544	183.2183	0.004046668	0.004487683
87	S-20	903	0.127824	0.165985	2.069567	0.005711631	0.032832	0.012056909	577.7484	0.012760492	0.014151159
88	S-21	253	0.011395	0.014797	0.184496	0.000509176	0.002927	0.001074841	51.5047	0.001137563	0.001261537
89	S-22	127	0.008172	0.010611	0.132304	0.000365135	0.002099	0.000770778	36.93448	0.000815757	0.00090466
90	S-23	98	0.005675	0.007369	0.091884	0.000253582	0.001458	0.000535296	25.65056	0.000566533	0.000628276

Table 25: On-Road Uncontrolled Daily Dust Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	HP	Quantity	Year	Trips/Day	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	Survey and Staking	Pickup - 1/2 Ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	2.992248	0.308327	0	0	0
2	S-02	Utility Locates	Flatbed truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0	0	0	0	2.393798	0.246661	0	0	0
3	S-02	Utility Locates	Pickup - 1 Ton	Diesel	410	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	2.992248	0.308327	0	0	0
4	S-03	Mobilization	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	1.196899	0.123331	0	0	0
5	S-03	Mobilization	Gang truck	Diesel	350	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	2.992248	0.308327	0	0	0
6	S-03	Mobilization	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
7	S-03	Mobilization	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0	0	0	0	2.393798	0.246661	0	0	0
8	S-03	Mobilization	Water truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
9	S-04	Access Road Construction	Pickup - 1/2 ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	2.992248	0.308327	0	0	0
10	S-04	Access Road Construction	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
11	S-04	Access Road Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	4.488372	0.46249	0	0	0
12	S-04	Access Road Construction	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
13	S-05	Conventional Structure Foundation Installation	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0	0	0	0	4.787597	0.493323	0	0	0
14	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
15	S-05	Conventional Structure Foundation Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
16	S-05	Conventional Structure Foundation Installation	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	4.488372	0.46249	0	0	0
17	S-06	Conventional Structure Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
18	S-06	Conventional Structure Installation	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
19	S-06	Conventional Structure Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
20	S-10	Helicopter Site Preparation	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0	0	0	0	1.196899	0.123331	0	0	0
21	S-07	Helicopter Support	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0	0	0	0	1.196899	0.123331	0	0	0
22	S-13	Conductor Installation	Jet Fuel Truck	Diesel	300	0	2027	0	20	0	98	0	0	vendor	0	0	0	0	0	0	0	0	0
23	S-13	Conductor Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
24	S-13	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
25	S-13	Conductor Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
26	S-14	Excavate Trench	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	1.196899	0.123331	0	0	0
27	S-14	Excavate Trench	Foreman Truck	Diesel	300	3	2027	6	20	120	99	118.8	1.2	passenger	0	0	0	0	1.835041	0.194919	0	0	0
28	S-14	Excavate Trench	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
29	S-14	Excavate Trench	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	4.488372	0.46249	0	0	0
30	S-14	Excavate Trench	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
31	S-15	Duct Bank & Conduit Installation	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	1.196899	0.123331	0	0	0
32	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
33	S-15	Duct Bank & Conduit Installation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
34	S-17	Paving	Concrete Truck	Diesel	425	5	2027	10	20	200	98	196	4	hhdt	0	0	0	0	5.984496	0.616654	0	0	0
35	S-17	Paving	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	1.196899	0.123331	0	0	0
36	S-17	Paving	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
37	S-18	Site Preparation	Flatbed truck	Diesel	350	0	2027	0	20	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
38	S-18	Site Preparation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
39	S-18	Site Preparation	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0	0	0	0	2.393798	0.246661	0	0	0
40	S-18	Site Preparation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
41	S-19	Below-Grade Construction	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
42	S-19	Below-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
43	S-19	Below-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
44	S-19	Below-Grade Construction	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0	0	0	0	4.787597	0.493323	0	0	0
45	S-19	Below-Grade Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	4.488372	0.46249	0	0	0
46	S-19	Below-Grade Construction	Tool - Van/Conex 20'	Diesel	0	1	2027	2	25	50	98	49	1	passenger	0	0	0	0	1.496124	0.154163	0	0	0
47	S-20	Above-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
48	S-20	Above-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
49	S-20	Above-Grade Construction	Welding Truck	Diesel	250	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	2.992248	0.308327	0	0	0
50	S-21	Commissioning and Testing	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
51	S-21	Commissioning and Testing	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
52	S-21	Commissioning and Testing	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
53	S-21	Commissioning and Testing	Tool - Van/Conex 20'	Diesel	0	3	2027	6	25	150	98	147	3	passenger	0	0	0	0	4.488372	0.46249	0	0	0
54	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
55	S-22	Site & ROW Restoration (overhead)	Dump Truck	Diesel	415	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
56	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
57	S-22	Site & ROW Restoration (overhead)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
58	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
59	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0	0	0	0	1.496124	0.154163	0	0	0
60	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0	0	0	0	1.496124	0.154163	0	0	0
61	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	5.984496	0.616654	0	0	0
62	S-23	Site & ROW Restoration (underground)	Dump Truck	Diesel	415	0	2027	0	25	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
63	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	2.992248	0.308327	0	0	0
64	S-23	Site & ROW Restoration (underground)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
65	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	1.496124	0.154163	0	0	0
66	S-23	Site & ROW Restoration (underground)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0	0	0	0	1.496124	0.154163	0	0	0
67	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0	0	0	0	1.496124	0.154163	0	0	0
68	S-01	Survey and Staking	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
69	S-02	Utility Locates	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
70	S-03	Mobilization	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0	0	0	0	13.45697	1.429407	0	0	0
71	S-04	Access Road Construction	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0	0	0	0	13.45697	1.429407	0	0	0
72	S-05	Conventional Structure Foundation Installation	Worker Commute	Gasoline	NA	19	2027	38	40	1520	99	1504.8	15.2	passenger	0	0	0	0	23.24385	2.468976	0	0	0
73	S-06	Conventional Structure Installation	Worker Commute	Gasoline	NA	12	2027	24	40	960	99	950.4	9.6	passenger	0	0	0	0	14.68033	1.559353	0	0	0
74	S-07	Helicopter Support	Worker Commute	Gasoline	NA	14	2027	28	40	1120	99	1108.8	11.2	passenger	0	0	0	0	17.12705	1.819245	0	0	0
75	S-08	Helicopter Landing Pad Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
76	S-09	Helicopter Landing Platform Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
77	S-10	Helicopter Site Preparation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
78	S-11	Helicopter Structure Foundation Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
79	S-12	Helicopter Structure Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	6.116803	0.64973	0	0	0
80	S-13	Conductor Installation	Worker Commute	Gasoline	NA	16	2027	32	40	1280	99	1267.2	12.8	passenger	0	0	0	0	19.57377	2.079137	0	0	0
81	S-14	Excavate Trench	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0	0	0	0	11.01025	1.169515	0	0	0
82	S-15	Duct Bank & Conduit Installation	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0	0	0	0	8.563524	0.909623	0	0	0
83	S-16	Cable Installation	Worker Commute	Gasoline	NA	6	2027	12	40	480	99	475.2	4.8	passenger	0	0	0	0	7.340164	0.779677	0	0	0
84	S-17	Paving	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0	0	0	0	9.786885	1.039569	0	0	0
85	S-18	Site Preparation	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0	0	0	0	9.786885	1.039569	0	0	0
86	S-19	Below-Grade Construction	Worker Commute	Gasoline	NA	21	2027	42	40	1680	99	1663.2	16.8	passenger	0	0	0	0	25.69057	2.728868	0	0	0
87	S-20	Above-Grade Construction	Worker Commute	Gasoline	NA	22	2027	44	40	1760	99	1742.4	17.6	passenger	0	0	0	0	26.91393	2.858814	0	0	0
88	S-21	Commissioning and Testing	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0	0	0	0	8.563524	0.909623	0	0	0
89	S-22	Site & ROW Restoration (overhead)	Worker Commute	Gasoline	NA	10	2027	20	40	800	99	792	8	passenger	0	0	0	0	12.23361	1.299461	0	0	0
90	S-23	Site & ROW Restoration (underground)	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0	0	0	0	11.01025	1.169515	0	0	0

Table 26: On-Road Uncontrolled Dust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	1052	0	0	0	0	1.573922	0.16218	0	0	0
2	S-02	1052	0	0	0	0	1.259138	0.129744	0	0	0
3	S-02	1052	0	0	0	0	1.573922	0.16218	0	0	0
4	S-03	47	0	0	0	0	0.028127	0.002898	0	0	0
5	S-03	47	0	0	0	0	0.070318	0.007246	0	0	0
6	S-03	47	0	0	0	0	0.140636	0.014491	0	0	0
7	S-03	47	0	0	0	0	0.056254	0.005797	0	0	0
8	S-03	47	0	0	0	0	0.070318	0.007246	0	0	0
9	S-04	203	0	0	0	0	0.303713	0.031295	0	0	0
10	S-04	203	0	0	0	0	0.607426	0.06259	0	0	0
11	S-04	203	0	0	0	0	0.45557	0.046943	0	0	0
12	S-04	203	0	0	0	0	0.303713	0.031295	0	0	0
13	S-05	303	0	0	0	0	0.725321	0.074738	0	0	0
14	S-05	303	0	0	0	0	0.906651	0.093423	0	0	0
15	S-05	303	0	0	0	0	0.453326	0.046712	0	0	0
16	S-05	303	0	0	0	0	0.679988	0.070067	0	0	0
17	S-06	252	0	0	0	0	0.754046	0.077698	0	0	0
18	S-06	252	0	0	0	0	0.754046	0.077698	0	0	0
19	S-06	252	0	0	0	0	0.377023	0.038849	0	0	0
20	S-10	203	0	0	0	0	0.121485	0.012518	0	0	0
21	S-07	239	0	0	0	0	0.143029	0.014738	0	0	0
22	S-13	76	0	0	0	0	0	0	0	0	0
23	S-13	76	0	0	0	0	0.227411	0.023433	0	0	0
24	S-13	76	0	0	0	0	0.227411	0.023433	0	0	0
25	S-13	76	0	0	0	0	0.113705	0.011716	0	0	0
26	S-14	201	0	0	0	0	0.120288	0.012395	0	0	0
27	S-14	201	0	0	0	0	0.184422	0.019589	0	0	0
28	S-14	201	0	0	0	0	0.601442	0.061974	0	0	0
29	S-14	201	0	0	0	0	0.451081	0.04648	0	0	0
30	S-14	201	0	0	0	0	0.15036	0.015493	0	0	0
31	S-15	199	0	0	0	0	0.119091	0.012271	0	0	0
32	S-15	199	0	0	0	0	0.595457	0.061357	0	0	0
33	S-15	199	0	0	0	0	0.148864	0.015339	0	0	0
34	S-17	201	0	0	0	0	0.601442	0.061974	0	0	0
35	S-17	201	0	0	0	0	0.120288	0.012395	0	0	0
36	S-17	201	0	0	0	0	0.601442	0.061974	0	0	0
37	S-18	78	0	0	0	0	0	0	0	0	0
38	S-18	78	0	0	0	0	0.233395	0.024049	0	0	0
39	S-18	78	0	0	0	0	0.093358	0.00962	0	0	0
40	S-18	78	0	0	0	0	0.058349	0.006012	0	0	0
41	S-19	300	0	0	0	0	0.224419	0.023125	0	0	0
42	S-19	300	0	0	0	0	0.897674	0.092498	0	0	0
43	S-19	300	0	0	0	0	0.897674	0.092498	0	0	0
44	S-19	300	0	0	0	0	0.71814	0.073998	0	0	0
45	S-19	300	0	0	0	0	0.673256	0.069374	0	0	0
46	S-19	300	0	0	0	0	0.224419	0.023125	0	0	0
47	S-20	903	0	0	0	0	2.702	0.278419	0	0	0
48	S-20	903	0	0	0	0	2.702	0.278419	0	0	0
49	S-20	903	0	0	0	0	1.351	0.13921	0	0	0
50	S-21	253	0	0	0	0	0.757039	0.078007	0	0	0
51	S-21	253	0	0	0	0	0.757039	0.078007	0	0	0
52	S-21	253	0	0	0	0	0.18926	0.019502	0	0	0
53	S-21	253	0	0	0	0	0.567779	0.058505	0	0	0
54	S-22	127	0	0	0	0	0.380015	0.039158	0	0	0
55	S-22	127	0	0	0	0	0.190008	0.019579	0	0	0
56	S-22	127	0	0	0	0	0.190008	0.019579	0	0	0
57	S-22	127	0	0	0	0	0.095004	0.009789	0	0	0
58	S-22	127	0	0	0	0	0.095004	0.009789	0	0	0
59	S-22	127	0	0	0	0	0.095004	0.009789	0	0	0
60	S-22	127	0	0	0	0	0.095004	0.009789	0	0	0
61	S-23	98	0	0	0	0	0.29324	0.030216	0	0	0
62	S-23	98	0	0	0	0	0	0	0	0	0
63	S-23	98	0	0	0	0	0.14662	0.015108	0	0	0
64	S-23	98	0	0	0	0	0.07331	0.007554	0	0	0
65	S-23	98	0	0	0	0	0.07331	0.007554	0	0	0
66	S-23	98	0	0	0	0	0.07331	0.007554	0	0	0
67	S-23	98	0	0	0	0	0.07331	0.007554	0	0	0
68	S-01	1052	0	0	0	0	3.217438	0.341758	0	0	0
69	S-02	1052	0	0	0	0	3.217438	0.341758	0	0	0
70	S-03	47	0	0	0	0	0.316239	0.033591	0	0	0
71	S-04	203	0	0	0	0	1.365882	0.145085	0	0	0
72	S-05	303	0	0	0	0	3.521444	0.37405	0	0	0
73	S-06	252	0	0	0	0	1.849721	0.196478	0	0	0
74	S-07	239	0	0	0	0	2.046682	0.2174	0	0	0
75	S-08	203	0	0	0	0	0.620856	0.065948	0	0	0
76	S-09	203	0	0	0	0	0.620856	0.065948	0	0	0
77	S-10	203	0	0	0	0	0.620856	0.065948	0	0	0
78	S-11	216	0	0	0	0	0.660615	0.070171	0	0	0
79	S-12	164	0	0	0	0	0.501578	0.053278	0	0	0
80	S-13	76	0	0	0	0	0.743803	0.079007	0	0	0
81	S-14	201	0	0	0	0	1.10653	0.117536	0	0	0
82	S-15	199	0	0	0	0	0.852071	0.090507	0	0	0
83	S-16	227	0	0	0	0	0.833109	0.088493	0	0	0
84	S-17	201	0	0	0	0	0.983582	0.104477	0	0	0
85	S-18	78	0	0	0	0	0.381689	0.040543	0	0	0
86	S-19	300	0	0	0	0	3.853586	0.40933	0	0	0
87	S-20	903	0	0	0	0	12.15164	1.290755	0	0	0
88	S-21	253	0	0	0	0	1.083286	0.115067	0	0	0
89	S-22	127	0	0	0	0	0.776834	0.082516	0	0	0
90	S-23	98	0	0	0	0	0.539502	0.057306	0	0	0

Table 27: On-Road Controlled Daily Dust Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	HP	Quantity	Year	Trips/Day	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	Survey and Staking	Pickup - 1/2 Ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	0.80254	0.089822	0	0	0
2	S-02	Utility Locates	Flatbed truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0	0	0	0	0.642032	0.071857	0	0	0
3	S-02	Utility Locates	Pickup - 1 Ton	Diesel	410	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	0.80254	0.089822	0	0	0
4	S-03	Mobilization	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	0.321016	0.035929	0	0	0
5	S-03	Mobilization	Gang truck	Diesel	350	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	0.80254	0.089822	0	0	0
6	S-03	Mobilization	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
7	S-03	Mobilization	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0	0	0	0	0.642032	0.071857	0	0	0
8	S-03	Mobilization	Water truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
9	S-04	Access Road Construction	Pickup - 1/2 ton	Gasoline	395	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	0.80254	0.089822	0	0	0
10	S-04	Access Road Construction	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
11	S-04	Access Road Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	1.20381	0.134733	0	0	0
12	S-04	Access Road Construction	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
13	S-05	Conventional Structure Foundation Installation	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0	0	0	0	1.284064	0.143715	0	0	0
14	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
15	S-05	Conventional Structure Foundation Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
16	S-05	Conventional Structure Foundation Installation	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	1.20381	0.134733	0	0	0
17	S-06	Conventional Structure Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
18	S-06	Conventional Structure Installation	Pickup - 1 ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
19	S-06	Conventional Structure Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
20	S-10	Helicopter Site Preparation	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0	0	0	0	0.321016	0.035929	0	0	0
21	S-07	Helicopter Support	Jet Fuel Truck	Diesel	300	1	2027	2	20	40	98	39.2	0.8	vendor	0	0	0	0	0.321016	0.035929	0	0	0
22	S-13	Conductor Installation	Jet Fuel Truck	Diesel	300	0	2027	0	20	0	98	0	0	vendor	0	0	0	0	0	0	0	0	0
23	S-13	Conductor Installation	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
24	S-13	Conductor Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
25	S-13	Conductor Installation	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
26	S-14	Excavate Trench	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	0.321016	0.035929	0	0	0
27	S-14	Excavate Trench	Foreman Truck	Diesel	300	3	2027	6	20	120	99	118.8	1.2	passenger	0	0	0	0	0.521216	0.063816	0	0	0
28	S-14	Excavate Trench	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
29	S-14	Excavate Trench	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	1.20381	0.134733	0	0	0
30	S-14	Excavate Trench	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
31	S-15	Duct Bank & Conduit Installation	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	0.321016	0.035929	0	0	0
32	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
33	S-15	Duct Bank & Conduit Installation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
34	S-17	Paving	Concrete Truck	Diesel	425	5	2027	10	20	200	98	196	4	hhdt	0	0	0	0	1.60508	0.179643	0	0	0
35	S-17	Paving	Flatbed truck	Diesel	350	1	2027	2	20	40	98	39.2	0.8	hhdt	0	0	0	0	0.321016	0.035929	0	0	0
36	S-17	Paving	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
37	S-18	Site Preparation	Flatbed truck	Diesel	350	0	2027	0	20	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
38	S-18	Site Preparation	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
39	S-18	Site Preparation	Flatbed Truck	Diesel	350	2	2027	4	20	80	98	78.4	1.6	hhdt	0	0	0	0	0.642032	0.071857	0	0	0
40	S-18	Site Preparation	Water truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
41	S-19	Below-Grade Construction	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
42	S-19	Below-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
43	S-19	Below-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
44	S-19	Below-Grade Construction	Concrete Truck	Diesel	425	4	2027	8	20	160	98	156.8	3.2	hhdt	0	0	0	0	1.284064	0.143715	0	0	0
45	S-19	Below-Grade Construction	Dump Truck	Diesel	415	3	2027	6	25	150	98	147	3	hhdt	0	0	0	0	1.20381	0.134733	0	0	0
46	S-19	Below-Grade Construction	Tool - Van/Conex 20'	Diesel	0	1	2027	2	25	50	98	49	1	passenger	0	0	0	0	0.40127	0.044911	0	0	0
47	S-20	Above-Grade Construction	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
48	S-20	Above-Grade Construction	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
49	S-20	Above-Grade Construction	Welding Truck	Diesel	250	2	2027	4	25	100	98	98	2	passenger	0	0	0	0	0.80254	0.089822	0	0	0
50	S-21	Commissioning and Testing	Pickup - 1/2 Ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
51	S-21	Commissioning and Testing	Pickup - 1 Ton	Diesel	410	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
52	S-21	Commissioning and Testing	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
53	S-21	Commissioning and Testing	Tool - Van/Conex 20'	Diesel	0	3	2027	6	25	150	98	147	3	passenger	0	0	0	0	1.20381	0.134733	0	0	0
54	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
55	S-22	Site & ROW Restoration (overhead)	Dump Truck	Diesel	415	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
56	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
57	S-22	Site & ROW Restoration (overhead)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
58	S-22	Site & ROW Restoration (overhead)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
59	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0	0	0	0	0.40127	0.044911	0	0	0
60	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0	0	0	0	0.40127	0.044911	0	0	0
61	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	Gasoline	395	4	2027	8	25	200	98	196	4	passenger	0	0	0	0	1.60508	0.179643	0	0	0
62	S-23	Site & ROW Restoration (underground)	Dump Truck	Diesel	415	0	2027	0	25	0	98	0	0	hhdt	0	0	0	0	0	0	0	0	0
63	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	2	2027	4	25	100	98	98	2	hhdt	0	0	0	0	0.80254	0.089822	0	0	0
64	S-23	Site & ROW Restoration (underground)	Haul Truck	Diesel	425	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
65	S-23	Site & ROW Restoration (underground)	Water Truck	Diesel	300	1	2027	2	25	50	98	49	1	hhdt	0	0	0	0	0.40127	0.044911	0	0	0
66	S-23	Site & ROW Restoration (underground)	Hydroseed truck	Diesel	425	1	2027	2	25	50	98	49	1	vendor	0	0	0	0	0.40127	0.044911	0	0	0
67	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	Diesel	410	1	2027	2	25	50	98	49	1	passenger	0	0	0	0	0.40127	0.044911	0	0	0
68	S-01	Survey and Staking	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
69	S-02	Utility Locates	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
70	S-03	Mobilization	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0	0	0	0	3.822251	0.467984	0	0	0
71	S-04	Access Road Construction	Worker Commute	Gasoline	NA	11	2027	22	40	880	99	871.2	8.8	passenger	0	0	0	0	3.822251	0.467984	0	0	0
72	S-05	Conventional Structure Foundation Installation	Worker Commute	Gasoline	NA	19	2027	38	40	1520	99	1504.8	15.2	passenger	0	0	0	0	6.60207	0.808337	0	0	0
73	S-06	Conventional Structure Installation	Worker Commute	Gasoline	NA	12	2027	24	40	960	99	950.4	9.6	passenger	0	0	0	0	4.169728	0.510528	0	0	0
74	S-07	Helicopter Support	Worker Commute	Gasoline	NA	14	2027	28	40	1120	99	1108.8	11.2	passenger	0	0	0	0	4.864683	0.595617	0	0	0
75	S-08	Helicopter Landing Pad Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
76	S-09	Helicopter Landing Platform Construction	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
77	S-10	Helicopter Site Preparation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
78	S-11	Helicopter Structure Foundation Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
79	S-12	Helicopter Structure Installation	Worker Commute	Gasoline	NA	5	2027	10	40	400	99	396	4	passenger	0	0	0	0	1.737387	0.21272	0	0	0
80	S-13	Conductor Installation	Worker Commute	Gasoline	NA	16	2027	32	40	1280	99	1267.2	12.8	passenger	0	0	0	0	5.559638	0.680705	0	0	0
81	S-14	Excavate Trench	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0	0	0	0	3.127296	0.382896	0	0	0
82	S-15	Duct Bank & Conduit Installation	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0	0	0	0	2.432342	0.297808	0	0	0
83	S-16	Cable Installation	Worker Commute	Gasoline	NA	6	2027	12	40	480	99	475.2	4.8	passenger	0	0	0	0	2.084864	0.255264	0	0	0
84	S-17	Paving	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0	0	0	0	2.779819	0.340352	0	0	0
85	S-18	Site Preparation	Worker Commute	Gasoline	NA	8	2027	16	40	640	99	633.6	6.4	passenger	0	0	0	0	2.779819	0.340352	0	0	0
86	S-19	Below-Grade Construction	Worker Commute	Gasoline	NA	21	2027	42	40	1680	99	1663.2	16.8	passenger	0	0	0	0	7.297025	0.893425	0	0	0
87	S-20	Above-Grade Construction	Worker Commute	Gasoline	NA	22	2027	44	40	1760	99	1742.4	17.6	passenger	0	0	0	0	7.644502	0.935969	0	0	0
88	S-21	Commissioning and Testing	Worker Commute	Gasoline	NA	7	2027	14	40	560	99	554.4	5.6	passenger	0	0	0	0	2.432342	0.297808	0	0	0
89	S-22	Site & ROW Restoration (overhead)	Worker Commute	Gasoline	NA	10	2027	20	40	800	99	792	8	passenger	0	0	0	0	3.474774	0.42544	0	0	0
90	S-23	Site & ROW Restoration (underground)	Worker Commute	Gasoline	NA	9	2027	18	40	720	99	712.8	7.2	passenger	0	0	0	0	3.127296	0.382896	0	0	0

Table 28: On-Road Controlled Dust Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-01	1052	0	0	0	0	0.422136	0.047246	0	0	0
2	S-02	1052	0	0	0	0	0.337709	0.037797	0	0	0
3	S-02	1052	0	0	0	0	0.422136	0.047246	0	0	0
4	S-03	47	0	0	0	0	0.007544	0.000844	0	0	0
5	S-03	47	0	0	0	0	0.01886	0.002111	0	0	0
6	S-03	47	0	0	0	0	0.037719	0.004222	0	0	0
7	S-03	47	0	0	0	0	0.015088	0.001689	0	0	0
8	S-03	47	0	0	0	0	0.01886	0.002111	0	0	0
9	S-04	203	0	0	0	0	0.081458	0.009117	0	0	0
10	S-04	203	0	0	0	0	0.162916	0.018234	0	0	0
11	S-04	203	0	0	0	0	0.122187	0.013675	0	0	0
12	S-04	203	0	0	0	0	0.081458	0.009117	0	0	0
13	S-05	303	0	0	0	0	0.194536	0.021773	0	0	0
14	S-05	303	0	0	0	0	0.24317	0.027216	0	0	0
15	S-05	303	0	0	0	0	0.121585	0.013608	0	0	0
16	S-05	303	0	0	0	0	0.182377	0.020412	0	0	0
17	S-06	252	0	0	0	0	0.20224	0.022635	0	0	0
18	S-06	252	0	0	0	0	0.20224	0.022635	0	0	0
19	S-06	252	0	0	0	0	0.10112	0.011318	0	0	0
20	S-10	203	0	0	0	0	0.032583	0.003647	0	0	0
21	S-07	239	0	0	0	0	0.038361	0.004293	0	0	0
22	S-13	76	0	0	0	0	0	0	0	0	0
23	S-13	76	0	0	0	0	0.060993	0.006826	0	0	0
24	S-13	76	0	0	0	0	0.060993	0.006826	0	0	0
25	S-13	76	0	0	0	0	0.030497	0.003413	0	0	0
26	S-14	201	0	0	0	0	0.032262	0.003611	0	0	0
27	S-14	201	0	0	0	0	0.052382	0.006414	0	0	0
28	S-14	201	0	0	0	0	0.16131	0.018054	0	0	0
29	S-14	201	0	0	0	0	0.120983	0.013541	0	0	0
30	S-14	201	0	0	0	0	0.040328	0.004514	0	0	0
31	S-15	199	0	0	0	0	0.031941	0.003575	0	0	0
32	S-15	199	0	0	0	0	0.159705	0.017875	0	0	0
33	S-15	199	0	0	0	0	0.039926	0.004469	0	0	0
34	S-17	201	0	0	0	0	0.16131	0.018054	0	0	0
35	S-17	201	0	0	0	0	0.032262	0.003611	0	0	0
36	S-17	201	0	0	0	0	0.16131	0.018054	0	0	0
37	S-18	78	0	0	0	0	0	0	0	0	0
38	S-18	78	0	0	0	0	0.062598	0.007006	0	0	0
39	S-18	78	0	0	0	0	0.025039	0.002802	0	0	0
40	S-18	78	0	0	0	0	0.01565	0.001752	0	0	0
41	S-19	300	0	0	0	0	0.06019	0.006737	0	0	0
42	S-19	300	0	0	0	0	0.240762	0.026947	0	0	0
43	S-19	300	0	0	0	0	0.240762	0.026947	0	0	0
44	S-19	300	0	0	0	0	0.19261	0.021557	0	0	0
45	S-19	300	0	0	0	0	0.180571	0.02021	0	0	0
46	S-19	300	0	0	0	0	0.06019	0.006737	0	0	0
47	S-20	903	0	0	0	0	0.724693	0.081109	0	0	0
48	S-20	903	0	0	0	0	0.724693	0.081109	0	0	0
49	S-20	903	0	0	0	0	0.362347	0.040554	0	0	0
50	S-21	253	0	0	0	0	0.203043	0.022725	0	0	0
51	S-21	253	0	0	0	0	0.203043	0.022725	0	0	0
52	S-21	253	0	0	0	0	0.050761	0.005681	0	0	0
53	S-21	253	0	0	0	0	0.152282	0.017044	0	0	0
54	S-22	127	0	0	0	0	0.101923	0.011407	0	0	0
55	S-22	127	0	0	0	0	0.050961	0.005704	0	0	0
56	S-22	127	0	0	0	0	0.050961	0.005704	0	0	0
57	S-22	127	0	0	0	0	0.025481	0.002852	0	0	0
58	S-22	127	0	0	0	0	0.025481	0.002852	0	0	0
59	S-22	127	0	0	0	0	0.025481	0.002852	0	0	0
60	S-22	127	0	0	0	0	0.025481	0.002852	0	0	0
61	S-23	98	0	0	0	0	0.078649	0.008803	0	0	0
62	S-23	98	0	0	0	0	0	0	0	0	0
63	S-23	98	0	0	0	0	0.039324	0.004401	0	0	0
64	S-23	98	0	0	0	0	0.019662	0.002201	0	0	0
65	S-23	98	0	0	0	0	0.019662	0.002201	0	0	0
66	S-23	98	0	0	0	0	0.019662	0.002201	0	0	0
67	S-23	98	0	0	0	0	0.019662	0.002201	0	0	0
68	S-01	1052	0	0	0	0	0.913865	0.111891	0	0	0
69	S-02	1052	0	0	0	0	0.913865	0.111891	0	0	0
70	S-03	47	0	0	0	0	0.089823	0.010998	0	0	0
71	S-04	203	0	0	0	0	0.387958	0.0475	0	0	0
72	S-05	303	0	0	0	0	1.000214	0.122463	0	0	0
73	S-06	252	0	0	0	0	0.525386	0.064327	0	0	0
74	S-07	239	0	0	0	0	0.58133	0.071176	0	0	0
75	S-08	203	0	0	0	0	0.176345	0.021591	0	0	0
76	S-09	203	0	0	0	0	0.176345	0.021591	0	0	0
77	S-10	203	0	0	0	0	0.176345	0.021591	0	0	0
78	S-11	216	0	0	0	0	0.187638	0.022974	0	0	0
79	S-12	164	0	0	0	0	0.142466	0.017443	0	0	0
80	S-13	76	0	0	0	0	0.211266	0.025867	0	0	0
81	S-14	201	0	0	0	0	0.314293	0.038481	0	0	0
82	S-15	199	0	0	0	0	0.242018	0.029632	0	0	0
83	S-16	227	0	0	0	0	0.236632	0.028972	0	0	0
84	S-17	201	0	0	0	0	0.279372	0.034205	0	0	0
85	S-18	78	0	0	0	0	0.108413	0.013274	0	0	0
86	S-19	300	0	0	0	0	1.094554	0.134014	0	0	0
87	S-20	903	0	0	0	0	3.451493	0.42259	0	0	0
88	S-21	253	0	0	0	0	0.307691	0.037673	0	0	0
89	S-22	127	0	0	0	0	0.220648	0.027015	0	0	0
90	S-23	98	0	0	0	0	0.153238	0.018762	0	0	0

Table 29: Earth Moving Uncontrolled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	CalEEModType	EM Type	Acres Graded	Hours Bulldozed	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-04	Access Road Construction	Motor Grader	Diesel	2	6	Graders	grading	0.375	0	0	0	0	0	0.397688	0.042941	0	0	0
2	S-04	Access Road Construction	D6 Type Dozer	Diesel	1	6	Crawler Tractors	bulldozing	0	6	0	0	0	0	4.516565	2.482671	0	0	0
3	S-04	Access Road Construction	Bulldozer	Diesel	1	6	Crawler Tractors	bulldozing	0	6	0	0	0	0	4.516565	2.482671	0	0	0
4	S-04	Access Road Construction	Road Grader	Diesel	1	6	Graders	grading	0.375	0	0	0	0	0	0.397688	0.042941	0	0	0
5	S-22	Site & ROW Restoration (overhead)	D6 Type Dozer	Diesel	1	6	Crawler Tractors	bulldozing	0	6	0	0	0	0	4.516565	2.482671	0	0	0
6	S-22	Site & ROW Restoration (overhead)	Motor Grader	Diesel	1	6	Graders	grading	0.375	0	0	0	0	0	0.397688	0.042941	0	0	0

Table 30: Earth Moving Uncontrolled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-04	203	0	0	0	0	0.040365	0.004359	0	0	0
2	S-04	203	0	0	0	0	0.458431	0.251991	0	0	0
3	S-04	203	0	0	0	0	0.458431	0.251991	0	0	0
4	S-04	203	0	0	0	0	0.040365	0.004359	0	0	0
5	S-22	127	0	0	0	0	0.286802	0.15765	0	0	0
6	S-22	127	0	0	0	0	0.025253	0.002727	0	0	0

Table 31: Earth Moving Controlled Daily Emissions (pounds/day)

Count	Activity Index	Activity Name	Equipment Name	Fuel Type	Quantity	Hours Per Day	CalEEModType	EM Type	Acres Graded	Hours Bulldozed	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-04	Access Road Construction	Motor Grader	Diesel	2	6	Graders	grading	0.375	0	0	0	0	0	0.155098	0.016747	0	0	0
2	S-04	Access Road Construction	D6 Type Dozer	Diesel	1	6	Crawler Tractors	bulldozing	0	6	0	0	0	0	1.76146	0.968242	0	0	0
3	S-04	Access Road Construction	Bulldozer	Diesel	1	6	Crawler Tractors	bulldozing	0	6	0	0	0	0	1.76146	0.968242	0	0	0
4	S-04	Access Road Construction	Road Grader	Diesel	1	6	Graders	grading	0.375	0	0	0	0	0	0.155098	0.016747	0	0	0
5	S-22	Site & ROW Restoration (overhead)	D6 Type Dozer	Diesel	1	6	Crawler Tractors	bulldozing	0	6	0	0	0	0	1.76146	0.968242	0	0	0
6	S-22	Site & ROW Restoration (overhead)	Motor Grader	Diesel	1	6	Graders	grading	0.375	0	0	0	0	0	0.155098	0.016747	0	0	0

Table 32: Earth Moving Controlled Emissions (tons)

Count	Activity Index	Days Used	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
1	S-04	203	0	0	0	0	0.015742	0.0017	0	0	0
2	S-04	203	0	0	0	0	0.178788	0.098277	0	0	0
3	S-04	203	0	0	0	0	0.178788	0.098277	0	0	0
4	S-04	203	0	0	0	0	0.015742	0.0017	0	0	0
5	S-22	127	0	0	0	0	0.111853	0.061483	0	0	0
6	S-22	127	0	0	0	0	0.009849	0.001063	0	0	0

Table 33: Heavy-Duty Helicopter Emissions

Helicopter Model	Sikorsky Black Hawk		
Engine Type	T700-GE-700		
Fuel S Content by Weight	0.3	%	
Fuel Burn Rate	164	gal/hr	
Jet Fuel density	7	lbs/gal	
Fuel Type	Jet Fuel A		
High Heat Value	0.135	MMBtu/gal	(ARB 2012)
CO2 emission factor	72.22	kg CO2/MMBtu	(ARB 2012)

	Fuel (kg)	NOx (g)	HC	CO	PM	Fugitive PM
LTO	73	575.3	571	724.9	16.9	1500
Run	507.6	5430	1110	1320	1800	

	Emission Rate						
Activity	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Flight (lbs/hr)	2.442	2.904	11.946	0.093	3.960	3.643	3522.486
LTO (lbs)	1.256	1.595	1.266	0.045	3.337	0.727	230.265

Activity		Emissions lbs/day						
	Working Hrs	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Flight	4	9.768	11.616	47.784	0.372	15.840	7.286	14089.945
LTO	2	1.256	1.595	1.266	0.045	3.337	0.727	230.265
TOTAL		11.024	13.211	49.050	0.417	19.177	8.014	14320.210

Metric	Emissions lbs/hour						
	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Average Houly Emissions	1.837	2.202	8.175	0.069	3.196	1.336	2386.702

Construction Phase			Daily Emissions (pounds)						
	Hours Per Day	Working Days	HC	CO	NOx	SOx	PM10	PM2.5	CO2
S-10	2	239	3.675	4.404	16.350	0.139	6.392	2.671	4773.403
			0.000	0.000	0.000	0.000	0.000	0.000	0.000
			0.000	0.000	0.000	0.000	0.000	0.000	0.000

Construction Phase			Total Emissions (tons)						MT
	Hours Per Day	Working Days	HC	CO	NOx	SOx	PM10	PM2.5	CO2
S-10	2	239	0.439	0.526	1.954	0.017	0.764	0.319	570.422
			0.000	0.000	0.000	0.000	0.000	0.000	0.000
			0.000	0.000	0.000	0.000	0.000	0.000	0.000

NOTES:

California Air Resources Board (ARB). 2012. Regulation for the Mandatory Reporting of Greenhouse Gas Emissions. Petroleum Fuels. Section 95115(c)(1)
Ref: Swiss Confederation, DETEC and FOCA "Guidance on the Determination of Helicopter Emissions", 2015
Engine T700-GI-700

Fugitive dust estimates from Emission Factor Source: `
Fugitive dust estimates from Emission Factor Source: Dr. J. A. Gillies et. al. December 31, 2007. Particulate Matter Emissions for Dust from Unique Military Activities.

Table 34: Light-Duty Helicopter Emissions

Helicopter Model	Hughes 500		
Engine Type	DDA250-C18		
Fuel S Content by Weight	0.3	%	
Fuel Burn Rate	32	gal/hr	
Jet Fuel density	7	lbs/gal	
Fuel Type	Jet Fuel A		
High Heat Value	0.135	MMBtu/gal	(ARB 2012)
CO2 emission factor	72.22	kg CO2/MMBtu	(ARB 2012)

	Fuel (kg)	NOx (g)	HC	CO	PM	Fugitive PM
LTO	16.4	59.5	438.2	571.2	2.3	1500
Run	98.8	480	960	1200	16	

	Emission Rate						
Activity	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Flight (lbs/hr)	2.112	2.640	1.056	0.018	0.035	0.032	685.622
LTO (lbs)	0.964	1.257	0.131	0.010	3.305	0.698	51.731

Activity		Emissions lbs/day						
	Working Hrs	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Flight	7	14.784	18.480	7.392	0.127	0.246	0.097	4799.353
LTO	3	0.964	1.257	0.131	0.010	3.305	0.698	51.731
TOTAL		15.748	19.737	7.523	0.137	3.551	0.795	4851.084

Metric	Emissions lbs/hour						
	HC	CO	NOx	SOx	PM10	PM2.5	CO2
Average Houly Emissions	1.575	1.974	0.752	0.014	0.355	0.079	485.108

Construction Phase			Daily Emissions (pounds)						
	Hours Per Day	Working Days	HC	CO	NOx	SOx	PM10	PM2.5	CO2
S-10	6	203	9.449	11.842	4.514	0.082	2.131	0.477	2910.650
S-07	4	239	6.299	7.895	3.009	0.055	1.421	0.318	1940.433
S-13	4	76	6.299	7.895	3.009	0.055	1.421	0.318	1940.433

Construction Phase			Total Emissions (tons)						MT
	Hours Per Day	Working Days	HC	CO	NOx	SOx	PM10	PM2.5	CO2
S-10	6	203	0.959	1.202	0.458	0.008	0.216	0.048	295.431
S-07	4	239	0.753	0.943	0.360	0.007	0.170	0.038	231.882
S-13	4	76	0.239	0.300	0.114	0.002	0.054	0.012	73.736

NOTES:

California Air Resources Board (ARB). 2012. Regulation for the Mandatory Reporting of Greenhouse Gas Emissions. Petroleum Fuels. Section 95115(c)(1)
Ref: Swiss Confederation, DETEC and FOCA "Guidance on the Determination of Helicopter Emissions", 2015
Engine DDA250-C18

Fugitive dust estimates from Emission Factor Source: Dr. J. A. Gillies et. al. December 31, 2007. Particulate Matter Emissions for Dust from Unique Military Activities.
ARB's CEIDARS database PM2.5 fractions - construction dust category for fugitive and diesel vehicle exhaust category for combustion.

Table 35: Electrical Consumption Emission Factors

Utility	Year	CO2	CH4	N2O	SF6
SDG&E	2030	169.636	0.033	0.004	0

Units in lbs/MWh

Table 36: Annual Electrical Consumption GHG Emissions

Facility	Use (kW)	CO2	CH4	N2O	SF6	CO2e
Suncrest Substation	385400	29.654808	0.0057689	0.0006993	0	30.007409

Units in metric tons

Table 37: SF6 Emissions (metric tons/year)

Substation	Feature	Quantity	SF6 (each - lbs)	Total Volume (lbs)	Leak Rate (percent)	Annual Emissions (mt)	CO2e (mt)
Suncrest	500 kV CB	1	1840	1840	0.1	0.00083	19.613
Suncrest	230 kV CB	4	173	692	0.1	0.00031	7.376
Total				**2532**		**0.00115**	**26.990**

Table 38: O&M Uncontrolled Annual Emissions (tons)

Equipment Name	Fuel Type	Trips	Year	Trip Length	VMT	Paved Percent	Paved VMT	Unpaved VMT	On Type	ROG	NOX	CO	SO2	PM10	PM2.5	CO2	CH4	N2O	CO2e	CO2e Metric Tons
1-Ton Truck, 4x4	Diesel	1	2032	60	60	95	57	3	passenger	0.0000111	0.0000461	0.0000811	0.0000002	0.0000096	0.0000084	0.023769	5.1E-07	3.74E-06	0.02489737	0.02258652

Table 39: Total Uncontrolled Daily Emissions (pounds/day)

Index	Name	ROG	NOX	CO	SO2	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total	CO2	CH4	N2O
S-01	Survey and Staking	0.09	0.11	1.32	0.00	0.02	9.11	9.13	0.01	0.96	0.97	363.79	0.01	0.01
S-02	Utility Locates	1.94	13.93	22.02	0.04	0.41	11.50	11.91	0.36	1.20	1.56	3340.07	0.12	0.09
S-03	Mobilization	2.14	19.67	27.74	0.06	0.65	29.02	29.67	0.54	3.03	3.58	5519.29	0.18	0.22
S-04	Access Road Construction	2.18	18.90	17.54	0.07	0.80	39.74	40.54	0.67	8.18	8.85	6991.32	0.23	0.24
S-05	Conventional Structure Foundation Installation	1.91	16.12	18.23	0.07	0.77	41.50	42.26	0.61	4.35	4.96	7092.75	0.20	0.34
S-06	Conventional Structure Installation	1.00	6.76	8.67	0.03	0.37	29.64	30.01	0.30	3.10	3.40	3208.69	0.10	0.12
S-07	Helicopter Support	6.48	8.24	5.95	0.06	1.47	18.32	19.80	0.34	1.94	2.28	2858.68	0.02	0.04
S-08	Helicopter Landing Pad Construction	0.99	7.01	11.10	0.02	0.19	6.12	6.31	0.17	0.65	0.82	1591.83	0.06	0.02
S-09	Helicopter Landing Platform Construction	1.30	9.30	12.83	0.03	0.27	6.12	6.39	0.24	0.65	0.89	2855.57	0.11	0.03
S-10	Helicopter Site Preparation	26.38	33.35	44.00	0.45	17.09	7.31	24.41	6.33	0.77	7.10	15941.12	0.01	0.02
S-11	Helicopter Structure Foundation Installation	1.30	9.30	12.83	0.03	0.27	6.12	6.39	0.24	0.65	0.89	2855.57	0.11	0.03
S-12	Helicopter Structure Installation	0.11	0.57	1.55	0.00	0.03	6.12	6.15	0.02	0.65	0.67	371.49	0.01	0.01
S-13	Conductor Installation	8.99	31.69	22.91	0.12	2.51	34.54	37.04	1.27	3.62	4.89	9154.86	0.26	0.16
S-14	Excavate Trench	3.50	26.07	34.85	0.08	1.01	26.01	27.03	0.88	2.72	3.60	7669.32	0.26	0.25
S-15	Duct Bank & Conduit Installation	3.06	22.36	31.70	0.07	0.83	17.24	18.07	0.73	1.80	2.53	6534.42	0.24	0.14
S-16	Cable Installation	0.55	4.21	4.42	0.01	0.19	7.34	7.53	0.16	0.78	0.94	1371.39	0.05	0.02
S-17	Paving	1.50	11.95	9.79	0.02	0.80	22.95	23.76	0.69	2.40	3.08	2439.41	0.05	0.20
S-18	Site Preparation	0.58	3.93	9.14	0.02	0.25	19.66	19.92	0.20	2.06	2.25	2346.86	0.06	0.13
S-19	Below-Grade Construction	3.64	29.39	31.80	0.10	1.65	49.93	51.58	1.42	5.23	6.64	10065.58	0.33	0.35
S-20	Above-Grade Construction	2.58	19.89	28.45	0.07	0.97	41.88	42.85	0.85	4.40	5.25	7694.19	0.28	0.12
S-21	Commissioning and Testing	0.46	2.83	4.27	0.01	0.23	26.52	26.75	0.19	2.76	2.95	1446.85	0.04	0.09
S-22	Site & ROW Restoration (overhead)	0.99	9.15	10.22	0.04	0.41	35.10	35.51	0.31	5.68	5.98	4008.51	0.10	0.24
S-23	Site & ROW Restoration (underground)	0.53	4.41	7.99	0.02	0.25	25.97	26.22	0.17	2.71	2.88	2399.64	0.05	0.17

Table 40: Total Controlled Daily Emissions (pounds/day)

Index	Name	ROG	NOX	CO	SO2	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total	CO2	CH4	N2O
S-01	Survey and Staking	0.09	0.11	1.32	0.00	0.02	2.54	2.56	0.01	0.30	0.31	363.79	0.01	0.01
S-02	Utility Locates	1.94	13.93	22.02	0.04	0.41	3.18	3.59	0.36	0.37	0.73	3340.07	0.12	0.09
S-03	Mobilization	2.14	19.67	27.74	0.06	0.65	8.00	8.65	0.54	0.94	1.48	5519.29	0.18	0.22
S-04	Access Road Construction	2.18	18.90	17.54	0.07	0.80	12.07	12.87	0.67	2.93	3.60	6991.32	0.23	0.24
S-05	Conventional Structure Foundation Installation	1.91	16.12	18.23	0.07	0.77	11.50	12.27	0.61	1.36	1.96	7092.75	0.20	0.34
S-06	Conventional Structure Installation	1.00	6.76	8.67	0.03	0.37	8.18	8.55	0.30	0.96	1.26	3208.69	0.10	0.12
S-07	Helicopter Support	6.48	8.24	5.95	0.06	1.47	5.19	6.66	0.34	0.63	0.97	2858.68	0.02	0.04
S-08	Helicopter Landing Pad Construction	0.99	7.01	11.10	0.02	0.19	1.74	1.93	0.17	0.21	0.38	1591.83	0.06	0.02
S-09	Helicopter Landing Platform Construction	1.30	9.30	12.83	0.03	0.27	1.74	2.01	0.24	0.21	0.45	2855.57	0.11	0.03
S-10	Helicopter Site Preparation	26.38	33.35	44.00	0.45	17.09	2.06	19.15	6.33	0.25	6.57	15941.12	0.01	0.02
S-11	Helicopter Structure Foundation Installation	1.30	9.30	12.83	0.03	0.27	1.74	2.01	0.24	0.21	0.45	2855.57	0.11	0.03
S-12	Helicopter Structure Installation	0.11	0.57	1.55	0.00	0.03	1.74	1.77	0.02	0.21	0.23	371.49	0.01	0.01
S-13	Conductor Installation	8.99	31.69	22.91	0.12	2.51	9.57	12.08	1.27	1.13	2.40	9154.86	0.26	0.16
S-14	Excavate Trench	3.50	26.07	34.85	0.08	1.01	7.18	8.19	0.88	0.84	1.72	7669.32	0.26	0.25
S-15	Duct Bank & Conduit Installation	3.06	22.36	31.70	0.07	0.83	4.76	5.59	0.73	0.56	1.29	6534.42	0.24	0.14
S-16	Cable Installation	0.55	4.21	4.42	0.01	0.19	2.08	2.27	0.16	0.26	0.42	1371.39	0.05	0.02
S-17	Paving	1.50	11.95	9.79	0.02	0.80	6.31	7.11	0.69	0.74	1.42	2439.41	0.05	0.20
S-18	Site Preparation	0.58	3.93	9.14	0.02	0.25	5.43	5.68	0.20	0.64	0.83	2346.86	0.06	0.13
S-19	Below-Grade Construction	3.64	29.39	31.80	0.10	1.65	13.80	15.45	1.42	1.62	3.04	10065.58	0.33	0.35
S-20	Above-Grade Construction	2.58	19.89	28.45	0.07	0.97	11.66	12.63	0.85	1.39	2.23	7694.19	0.28	0.12
S-21	Commissioning and Testing	0.46	2.83	4.27	0.01	0.23	7.25	7.48	0.19	0.84	1.02	1446.85	0.04	0.09
S-22	Site & ROW Restoration (overhead)	0.99	9.15	10.22	0.04	0.41	10.21	10.62	0.31	1.95	2.26	4008.51	0.10	0.24
S-23	Site & ROW Restoration (underground)	0.53	4.41	7.99	0.02	0.25	7.14	7.39	0.17	0.83	1.00	2399.64	0.05	0.17

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	8/1/2027	8/2/2027	8/3/2027	8/4/2027	8/5/2027	8/6/2027	8/7/2027	8/8/2027	8/9/2027	8/10/2027	8/11/2027	8/12/2027	8/13/2027	8/14/2027	8/15/2027	8/16/2027	8/17/2027	8/18/2027	8/19/2027	8/20/2027	8/21/2027	8/22/2027	8/23/2027	8/24/2027	8/25/2027	8/26/2027	8/27/2027	8/28/2027	8/29/2027	8/30/2027	8/31/2027
44.26	ROG	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027
127.53	NOX	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040
165.17	CO	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331
0.82	SO2	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
21.94	PM10 Exhaust	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432
201.26	PM10 Dust	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612
223.20	PM10 Total	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044
9.46	PM2.5 Exhaust	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363
25.16	PM2.5 Dust	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163
34.62	PM2.5 Total	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526
49817.73	CO2	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862
1.05	CH4	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1.08	N2O	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101

Table 42: Daily Controlled Emissions

Max	Pollutant	8/1/2027	8/2/2027	8/3/2027	8/4/2027	8/5/2027	8/6/2027	8/7/2027	8/8/2027	8/9/2027	8/10/2027	8/11/2027	8/12/2027	8/13/2027	8/14/2027	8/15/2027	8/16/2027	8/17/2027	8/18/2027	8/19/2027	8/20/2027	8/21/2027	8/22/2027	8/23/2027	8/24/2027	8/25/2027	8/26/2027	8/27/2027	8/28/2027	8/29/2027	8/30/2027	8/31/2027
44.26	ROG	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027
127.53	NOX	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040
165.17	CO	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331
0.82	SO2	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
21.94	PM10 Exhaust	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432
57.09	PM10 Dust	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722
79.03	PM10 Total	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154
9.46	PM2.5 Exhaust	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363
8.29	PM2.5 Dust	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677
17.75	PM2.5 Total	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
49817.73	CO2	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862
1.05	CH4	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1.08	N2O	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	9/1/2027	9/2/2027	9/3/2027	9/4/2027	9/5/2027	9/6/2027	9/7/2027	9/8/2027	9/9/2027	9/10/2027	9/11/2027	9/12/2027	9/13/2027	9/14/2027	9/15/2027	9/16/2027	9/17/2027	9/18/2027	9/19/2027	9/20/2027	9/21/2027	9/22/2027	9/23/2027	9/24/2027	9/25/2027	9/26/2027	9/27/2027	9/28/2027	9/29/2027	9/30/2027	10/1/2027
44.26	ROG	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027
127.53	NOX	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040
165.17	CO	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331
0.82	SO2	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
21.94	PM10 Exhaust	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432
201.26	PM10 Dust	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612
223.20	PM10 Total	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044
9.46	PM2.5 Exhaust	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363
25.16	PM2.5 Dust	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163
34.62	PM2.5 Total	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526
49817.73	CO2	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862
1.05	CH4	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1.08	N2O	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101

Table 42: Daily Controlled Emissions

Max	Pollutant	9/1/2027	9/2/2027	9/3/2027	9/4/2027	9/5/2027	9/6/2027	9/7/2027	9/8/2027	9/9/2027	9/10/2027	9/11/2027	9/12/2027	9/13/2027	9/14/2027	9/15/2027	9/16/2027	9/17/2027	9/18/2027	9/19/2027	9/20/2027	9/21/2027	9/22/2027	9/23/2027	9/24/2027	9/25/2027	9/26/2027	9/27/2027	9/28/2027	9/29/2027	9/30/2027	10/1/2027
44.26	ROG	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027
127.53	NOX	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040
165.17	CO	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331
0.82	SO2	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
21.94	PM10 Exhaust	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432
57.09	PM10 Dust	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722
79.03	PM10 Total	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154
9.46	PM2.5 Exhaust	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363
8.29	PM2.5 Dust	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677
17.75	PM2.5 Total	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
49817.73	CO2	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862
1.05	CH4	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
1.08	N2O	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	10/2/2027	10/3/2027	10/4/2027	10/5/2027	10/6/2027	10/7/2027	10/8/2027	10/9/2027	10/10/2027	10/11/2027	10/12/2027	10/13/2027	10/14/2027	10/15/2027	10/16/2027	10/17/2027	10/18/2027	10/19/2027	10/20/2027	10/21/2027	10/22/2027	10/23/2027	10/24/2027	10/25/2027	10/26/2027	10/27/2027	10/28/2027	10/29/2027	10/30/2027	10/31/2027	11/1/2027
44.26	ROG	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	4.165
127.53	NOX	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	33.709
165.17	CO	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	51.069
0.82	SO2	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.103
21.94	PM10 Exhaust	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	1.083
201.26	PM10 Dust	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	20.612	49.629
223.20	PM10 Total	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	21.044	50.712
9.46	PM2.5 Exhaust	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.906
25.16	PM2.5 Dust	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	2.163	5.195
34.62	PM2.5 Total	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	2.526	6.101
49817.73	CO2	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	9223.155
1.05	CH4	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.300
1.08	N2O	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.322

Table 42: Daily Controlled Emissions

Max	Pollutant	10/2/2027	10/3/2027	10/4/2027	10/5/2027	10/6/2027	10/7/2027	10/8/2027	10/9/2027	10/10/2027	10/11/2027	10/12/2027	10/13/2027	10/14/2027	10/15/2027	10/16/2027	10/17/2027	10/18/2027	10/19/2027	10/20/2027	10/21/2027	10/22/2027	10/23/2027	10/24/2027	10/25/2027	10/26/2027	10/27/2027	10/28/2027	10/29/2027	10/30/2027	10/31/2027	11/1/2027
44.26	ROG	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	2.027	4.165
127.53	NOX	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	14.040	33.709
165.17	CO	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	23.331	51.069
0.82	SO2	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.103
21.94	PM10 Exhaust	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	0.432	1.083
57.09	PM10 Dust	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	5.722	13.717
79.03	PM10 Total	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	6.154	14.801
9.46	PM2.5 Exhaust	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.363	0.906
8.29	PM2.5 Dust	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	0.677	1.612
17.75	PM2.5 Total	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	2.518
49817.73	CO2	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	3703.862	9223.155
1.05	CH4	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.300
1.08	N2O	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.322

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	11/2/2027	11/3/2027	11/4/2027	11/5/2027	11/6/2027	11/7/2027	11/8/2027	11/9/2027	11/10/2027	11/11/2027	11/12/2027	11/13/2027	11/14/2027	11/15/2027	11/16/2027	11/17/2027	11/18/2027	11/19/2027	11/20/2027	11/21/2027	11/22/2027	11/23/2027	11/24/2027	11/25/2027	11/26/2027	11/27/2027	11/28/2027	11/29/2027	11/30/2027	12/1/2027	12/2/2027
44.26	ROG	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165
127.53	NOX	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709
165.17	CO	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069
0.82	SO2	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103
21.94	PM10 Exhaust	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083
201.26	PM10 Dust	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629
223.20	PM10 Total	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712
9.46	PM2.5 Exhaust	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906
25.16	PM2.5 Dust	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195
34.62	PM2.5 Total	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101
49817.73	CO2	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155
1.05	CH4	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
1.08	N2O	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322

Table 42: Daily Controlled Emissions

Max	Pollutant	11/2/2027	11/3/2027	11/4/2027	11/5/2027	11/6/2027	11/7/2027	11/8/2027	11/9/2027	11/10/2027	11/11/2027	11/12/2027	11/13/2027	11/14/2027	11/15/2027	11/16/2027	11/17/2027	11/18/2027	11/19/2027	11/20/2027	11/21/2027	11/22/2027	11/23/2027	11/24/2027	11/25/2027	11/26/2027	11/27/2027	11/28/2027	11/29/2027	11/30/2027	12/1/2027	12/2/2027
44.26	ROG	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165
127.53	NOX	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709
165.17	CO	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069
0.82	SO2	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103
21.94	PM10 Exhaust	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083
57.09	PM10 Dust	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717
79.03	PM10 Total	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801
9.46	PM2.5 Exhaust	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906
8.29	PM2.5 Dust	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612
17.75	PM2.5 Total	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518
49817.73	CO2	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155
1.05	CH4	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
1.08	N2O	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	12/3/2027	12/4/2027	12/5/2027	12/6/2027	12/7/2027	12/8/2027	12/9/2027	12/10/2027	12/11/2027	12/12/2027	12/13/2027	12/14/2027	12/15/2027	12/16/2027	12/17/2027	12/18/2027	12/19/2027	12/20/2027	12/21/2027	12/22/2027	12/23/2027	12/24/2027	12/25/2027	12/26/2027	12/27/2027	12/28/2027	12/29/2027	12/30/2027	12/31/2027	1/1/2028	1/2/2028
44.26	ROG	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	2.027	39.349
127.53	NOX	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	14.040	90.847
165.17	CO	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	23.331	114.755
0.82	SO2	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.042	0.668
21.94	PM10 Exhaust	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	0.432	20.253
201.26	PM10 Dust	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	49.629	20.612	98.226
223.20	PM10 Total	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	50.712	21.044	118.479
9.46	PM2.5 Exhaust	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.363	8.102
25.16	PM2.5 Dust	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	5.195	2.163	14.354
34.62	PM2.5 Total	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	6.101	2.526	22.456
49817.73	CO2	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	3703.862	33942.378
1.05	CH4	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.125	0.558
1.08	N2O	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.101	0.445

Table 42: Daily Controlled Emissions

Max	Pollutant	12/3/2027	12/4/2027	12/5/2027	12/6/2027	12/7/2027	12/8/2027	12/9/2027	12/10/2027	12/11/2027	12/12/2027	12/13/2027	12/14/2027	12/15/2027	12/16/2027	12/17/2027	12/18/2027	12/19/2027	12/20/2027	12/21/2027	12/22/2027	12/23/2027	12/24/2027	12/25/2027	12/26/2027	12/27/2027	12/28/2027	12/29/2027	12/30/2027	12/31/2027	1/1/2028	1/2/2028
44.26	ROG	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	4.165	2.027	39.349
127.53	NOX	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	33.709	14.040	90.847
165.17	CO	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	51.069	23.331	114.755
0.82	SO2	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.042	0.668
21.94	PM10 Exhaust	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	1.083	0.432	20.253
57.09	PM10 Dust	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	13.717	5.722	28.510
79.03	PM10 Total	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	14.801	6.154	48.763
9.46	PM2.5 Exhaust	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.906	0.363	8.102
8.29	PM2.5 Dust	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	1.612	0.677	4.915
17.75	PM2.5 Total	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	2.518	1.040	13.016
49817.73	CO2	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	9223.155	3703.862	33942.378
1.05	CH4	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.125	0.558
1.08	N2O	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.101	0.445

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	1/3/2028	1/4/2028	1/5/2028	1/6/2028	1/7/2028	1/8/2028	1/9/2028	1/10/2028	1/11/2028	1/12/2028	1/13/2028	1/14/2028	1/15/2028	1/16/2028	1/17/2028	1/18/2028	1/19/2028	1/20/2028	1/21/2028	1/22/2028	1/23/2028	1/24/2028	1/25/2028	1/26/2028	1/27/2028	1/28/2028	1/29/2028	1/30/2028	1/31/2028	2/1/2028	2/2/2028
44.26	ROG	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	42.558
127.53	NOX	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	116.266
165.17	CO	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	145.811
0.82	SO2	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.766
21.94	PM10 Exhaust	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	21.289
201.26	PM10 Dust	98.226	98.226	98.226	98.226	98.226	98.226	98.226	98.226	98.226	98.226	98.226	98.226	98.226	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	104.343	145.839
223.20	PM10 Total	118.479	118.479	118.479	118.479	118.479	118.479	118.479	118.479	118.479	118.479	118.479	118.479	118.479	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	124.864	167.129
9.46	PM2.5 Exhaust	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.947
25.16	PM2.5 Dust	14.354	14.354	14.354	14.354	14.354	14.354	14.354	14.354	14.354	14.354	14.354	14.354	14.354	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	15.004	19.354
34.62	PM2.5 Total	22.456	22.456	22.456	22.456	22.456	22.456	22.456	22.456	22.456	22.456	22.456	22.456	22.456	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	23.344	28.301
49817.73	CO2	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	43890.698
1.05	CH4	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.872
1.08	N2O	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.814

Table 42: Daily Controlled Emissions

Max	Pollutant	1/3/2028	1/4/2028	1/5/2028	1/6/2028	1/7/2028	1/8/2028	1/9/2028	1/10/2028	1/11/2028	1/12/2028	1/13/2028	1/14/2028	1/15/2028	1/16/2028	1/17/2028	1/18/2028	1/19/2028	1/20/2028	1/21/2028	1/22/2028	1/23/2028	1/24/2028	1/25/2028	1/26/2028	1/27/2028	1/28/2028	1/29/2028	1/30/2028	1/31/2028	2/1/2028	2/2/2028
44.26	ROG	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	39.349	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	40.647	42.558
127.53	NOX	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	90.847	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	100.149	116.266
165.17	CO	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	114.755	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	127.586	145.811
0.82	SO2	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.699	0.766
21.94	PM10 Exhaust	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.253	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	20.521	21.289
57.09	PM10 Dust	28.510	28.510	28.510	28.510	28.510	28.510	28.510	28.510	28.510	28.510	28.510	28.510	28.510	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	30.247	41.745
79.03	PM10 Total	48.763	48.763	48.763	48.763	48.763	48.763	48.763	48.763	48.763	48.763	48.763	48.763	48.763	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	50.769	63.034
9.46	PM2.5 Exhaust	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.102	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.340	8.947
8.29	PM2.5 Dust	4.915	4.915	4.915	4.915	4.915	4.915	4.915	4.915	4.915	4.915	4.915	4.915	4.915	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	5.127	6.484
17.75	PM2.5 Total	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.016	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	13.467	15.431
49817.73	CO2	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	33942.378	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	36797.949	43890.698
1.05	CH4	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.558	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.668	0.872
1.08	N2O	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.445	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.473	0.814

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	2/3/2028	2/4/2028	2/5/2028	2/6/2028	2/7/2028	2/8/2028	2/9/2028	2/10/2028	2/11/2028	2/12/2028	2/13/2028	2/14/2028	2/15/2028	2/16/2028	2/17/2028	2/18/2028	2/19/2028	2/20/2028	2/21/2028	2/22/2028	2/23/2028	2/24/2028	2/25/2028	2/26/2028	2/27/2028	2/28/2028	2/29/2028	3/1/2028	3/2/2028	3/3/2028	3/4/2028
44.26	ROG	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558
127.53	NOX	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266
165.17	CO	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811
0.82	SO2	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766
21.94	PM10 Exhaust	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289
201.26	PM10 Dust	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839
223.20	PM10 Total	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129
9.46	PM2.5 Exhaust	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947
25.16	PM2.5 Dust	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354
34.62	PM2.5 Total	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301
49817.73	CO2	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698
1.05	CH4	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872
1.08	N2O	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814

Table 42: Daily Controlled Emissions

Max	Pollutant	2/3/2028	2/4/2028	2/5/2028	2/6/2028	2/7/2028	2/8/2028	2/9/2028	2/10/2028	2/11/2028	2/12/2028	2/13/2028	2/14/2028	2/15/2028	2/16/2028	2/17/2028	2/18/2028	2/19/2028	2/20/2028	2/21/2028	2/22/2028	2/23/2028	2/24/2028	2/25/2028	2/26/2028	2/27/2028	2/28/2028	2/29/2028	3/1/2028	3/2/2028	3/3/2028	3/4/2028
44.26	ROG	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558
127.53	NOX	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266
165.17	CO	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811
0.82	SO2	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766
21.94	PM10 Exhaust	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289
57.09	PM10 Dust	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745
79.03	PM10 Total	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034
9.46	PM2.5 Exhaust	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947
8.29	PM2.5 Dust	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484
17.75	PM2.5 Total	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431
49817.73	CO2	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698
1.05	CH4	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872
1.08	N2O	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	3/5/2028	3/6/2028	3/7/2028	3/8/2028	3/9/2028	3/10/2028	3/11/2028	3/12/2028	3/13/2028	3/14/2028	3/15/2028	3/16/2028	3/17/2028	3/18/2028	3/19/2028	3/20/2028	3/21/2028	3/22/2028	3/23/2028	3/24/2028	3/25/2028	3/26/2028	3/27/2028	3/28/2028	3/29/2028	3/30/2028	3/31/2028	4/1/2028	4/2/2028	4/3/2028	4/4/2028
44.26	ROG	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.673	43.676	43.676	43.676
127.53	NOX	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.841	123.596	123.596	123.596
165.17	CO	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	147.361	156.031	156.031	156.031
0.82	SO2	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.770	0.800	0.800	0.800
21.94	PM10 Exhaust	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.318	21.688	21.688	21.688
201.26	PM10 Dust	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	145.839	151.956	181.598	181.598	181.598
223.20	PM10 Total	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	167.129	173.274	203.285	203.285	203.285
9.46	PM2.5 Exhaust	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.965	9.261	9.261	9.261
25.16	PM2.5 Dust	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	19.354	20.004	23.105	23.105	23.105
34.62	PM2.5 Total	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.301	28.968	32.365	32.365	32.365
49817.73	CO2	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	44262.185	47470.874	47470.874	47470.874
1.05	CH4	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.882	0.979	0.979	0.979
1.08	N2O	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.822	0.944	0.944	0.944

Table 42: Daily Controlled Emissions

Max	Pollutant	3/5/2028	3/6/2028	3/7/2028	3/8/2028	3/9/2028	3/10/2028	3/11/2028	3/12/2028	3/13/2028	3/14/2028	3/15/2028	3/16/2028	3/17/2028	3/18/2028	3/19/2028	3/20/2028	3/21/2028	3/22/2028	3/23/2028	3/24/2028	3/25/2028	3/26/2028	3/27/2028	3/28/2028	3/29/2028	3/30/2028	3/31/2028	4/1/2028	4/2/2028	4/3/2028	4/4/2028
44.26	ROG	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.558	42.673	43.676	43.676	43.676
127.53	NOX	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.266	116.841	123.596	123.596	123.596
165.17	CO	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	145.811	147.361	156.031	156.031	156.031
0.82	SO2	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.766	0.770	0.800	0.800	0.800
21.94	PM10 Exhaust	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.289	21.318	21.688	21.688	21.688
57.09	PM10 Dust	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	41.745	43.482	51.665	51.665	51.665
79.03	PM10 Total	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	63.034	64.800	73.353	73.353	73.353
9.46	PM2.5 Exhaust	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.947	8.965	9.261	9.261	9.261
8.29	PM2.5 Dust	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.484	6.696	7.656	7.656	7.656
17.75	PM2.5 Total	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.431	15.661	16.917	16.917	16.917
49817.73	CO2	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	43890.698	44262.185	47470.874	47470.874	47470.874
1.05	CH4	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.872	0.882	0.979	0.979	0.979
1.08	N2O	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.814	0.822	0.944	0.944	0.944

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	4/5/2028	4/6/2028	4/7/2028	4/8/2028	4/9/2028	4/10/2028	4/11/2028	4/12/2028	4/13/2028	4/14/2028	4/15/2028	4/16/2028	4/17/2028	4/18/2028	4/19/2028	4/20/2028	4/21/2028	4/22/2028	4/23/2028	4/24/2028	4/25/2028	4/26/2028	4/27/2028	4/28/2028	4/29/2028	4/30/2028	5/1/2028	5/2/2028	5/3/2028	5/4/2028	5/5/2028
44.26	ROG	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676
127.53	NOX	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596
165.17	CO	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031
0.82	SO2	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800
21.94	PM10 Exhaust	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688
201.26	PM10 Dust	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598
223.20	PM10 Total	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285
9.46	PM2.5 Exhaust	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261
25.16	PM2.5 Dust	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105
34.62	PM2.5 Total	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365
49817.73	CO2	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874
1.05	CH4	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979
1.08	N2O	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944

Table 42: Daily Controlled Emissions

Max	Pollutant	4/5/2028	4/6/2028	4/7/2028	4/8/2028	4/9/2028	4/10/2028	4/11/2028	4/12/2028	4/13/2028	4/14/2028	4/15/2028	4/16/2028	4/17/2028	4/18/2028	4/19/2028	4/20/2028	4/21/2028	4/22/2028	4/23/2028	4/24/2028	4/25/2028	4/26/2028	4/27/2028	4/28/2028	4/29/2028	4/30/2028	5/1/2028	5/2/2028	5/3/2028	5/4/2028	5/5/2028
44.26	ROG	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676
127.53	NOX	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596
165.17	CO	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031
0.82	SO2	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800
21.94	PM10 Exhaust	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688
57.09	PM10 Dust	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665
79.03	PM10 Total	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353
9.46	PM2.5 Exhaust	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261
8.29	PM2.5 Dust	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656
17.75	PM2.5 Total	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917
49817.73	CO2	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874
1.05	CH4	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979
1.08	N2O	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	5/6/2028	5/7/2028	5/8/2028	5/9/2028	5/10/2028	5/11/2028	5/12/2028	5/13/2028	5/14/2028	5/15/2028	5/16/2028	5/17/2028	5/18/2028	5/19/2028	5/20/2028	5/21/2028	5/22/2028	5/23/2028	5/24/2028	5/25/2028	5/26/2028	5/27/2028	5/28/2028	5/29/2028	5/30/2028	5/31/2028	6/1/2028	6/2/2028	6/3/2028	6/4/2028	6/5/2028
44.26	ROG	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	44.261	44.261	44.261	44.261	44.261
127.53	NOX	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	127.526	127.526	127.526	127.526	127.526
165.17	CO	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	165.172	165.172	165.172	165.172	165.172
0.82	SO2	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.822	0.822	0.822	0.822	0.822
21.94	PM10 Exhaust	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.941	21.941	21.941	21.941	21.941
201.26	PM10 Dust	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	181.598	201.259	201.259	201.259	201.259	201.259
223.20	PM10 Total	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	203.285	223.200	223.200	223.200	223.200	223.200
9.46	PM2.5 Exhaust	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.457	9.457	9.457	9.457	9.457
25.16	PM2.5 Dust	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	23.105	25.162	25.162	25.162	25.162	25.162
34.62	PM2.5 Total	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	32.365	34.619	34.619	34.619	34.619	34.619
49817.73	CO2	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	49817.731	49817.731	49817.731	49817.731	49817.731
1.05	CH4	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	1.043	1.043	1.043	1.043	1.043
1.08	N2O	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	1.072	1.072	1.072	1.072	1.072

max max max max max

Table 42: Daily Controlled Emissions

Max	Pollutant	5/6/2028	5/7/2028	5/8/2028	5/9/2028	5/10/2028	5/11/2028	5/12/2028	5/13/2028	5/14/2028	5/15/2028	5/16/2028	5/17/2028	5/18/2028	5/19/2028	5/20/2028	5/21/2028	5/22/2028	5/23/2028	5/24/2028	5/25/2028	5/26/2028	5/27/2028	5/28/2028	5/29/2028	5/30/2028	5/31/2028	6/1/2028	6/2/2028	6/3/2028	6/4/2028	6/5/2028
44.26	ROG	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	43.676	44.261	44.261	44.261	44.261	44.261
127.53	NOX	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	123.596	127.526	127.526	127.526	127.526	127.526
165.17	CO	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	156.031	165.172	165.172	165.172	165.172	165.172
0.82	SO2	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.800	0.822	0.822	0.822	0.822	0.822
21.94	PM10 Exhaust	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.688	21.941	21.941	21.941	21.941	21.941
57.09	PM10 Dust	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	51.665	57.093	57.093	57.093	57.093	57.093
79.03	PM10 Total	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	73.353	79.034	79.034	79.034	79.034	79.034
9.46	PM2.5 Exhaust	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.261	9.457	9.457	9.457	9.457	9.457
8.29	PM2.5 Dust	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	7.656	8.293	8.293	8.293	8.293	8.293
17.75	PM2.5 Total	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	16.917	17.750	17.750	17.750	17.750	17.750
49817.73	CO2	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	47470.874	49817.731	49817.731	49817.731	49817.731	49817.731
1.05	CH4	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	1.043	1.043	1.043	1.043	1.043
1.08	N2O	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	0.944	1.072	1.072	1.072	1.072	1.072

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	6/6/2028	6/7/2028	6/8/2028	6/9/2028	6/10/2028	6/11/2028	6/12/2028	6/13/2028	6/14/2028	6/15/2028	6/16/2028	6/17/2028	6/18/2028	6/19/2028	6/20/2028	6/21/2028	6/22/2028	6/23/2028	6/24/2028	6/25/2028	6/26/2028	6/27/2028	6/28/2028	6/29/2028	6/30/2028	7/1/2028	7/2/2028	7/3/2028	7/4/2028	7/5/2028	7/6/2028
44.26	ROG	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261
127.53	NOX	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526
165.17	CO	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172
0.82	SO2	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822
21.94	PM10 Exhaust	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941
201.26	PM10 Dust	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259
223.20	PM10 Total	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200
9.46	PM2.5 Exhaust	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457
25.16	PM2.5 Dust	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162
34.62	PM2.5 Total	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619
49817.73	CO2	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731
1.05	CH4	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043
1.08	N2O	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072

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Table 42: Daily Controlled Emissions

Max	Pollutant	6/6/2028	6/7/2028	6/8/2028	6/9/2028	6/10/2028	6/11/2028	6/12/2028	6/13/2028	6/14/2028	6/15/2028	6/16/2028	6/17/2028	6/18/2028	6/19/2028	6/20/2028	6/21/2028	6/22/2028	6/23/2028	6/24/2028	6/25/2028	6/26/2028	6/27/2028	6/28/2028	6/29/2028	6/30/2028	7/1/2028	7/2/2028	7/3/2028	7/4/2028	7/5/2028	7/6/2028
44.26	ROG	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261
127.53	NOX	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526
165.17	CO	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172
0.82	SO2	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822
21.94	PM10 Exhaust	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941
57.09	PM10 Dust	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093
79.03	PM10 Total	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034
9.46	PM2.5 Exhaust	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457
8.29	PM2.5 Dust	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293
17.75	PM2.5 Total	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750
49817.73	CO2	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731
1.05	CH4	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043
1.08	N2O	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	7/7/2028	7/8/2028	7/9/2028	7/10/2028	7/11/2028	7/12/2028	7/13/2028	7/14/2028	7/15/2028	7/16/2028	7/17/2028	7/18/2028	7/19/2028	7/20/2028	7/21/2028	7/22/2028	7/23/2028	7/24/2028	7/25/2028	7/26/2028	7/27/2028	7/28/2028	7/29/2028	7/30/2028	7/31/2028	8/1/2028	8/2/2028	8/3/2028	8/4/2028	8/5/2028	8/6/2028
44.26	ROG	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261
127.53	NOX	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526
165.17	CO	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172
0.82	SO2	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822
21.94	PM10 Exhaust	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941
201.26	PM10 Dust	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259
223.20	PM10 Total	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200
9.46	PM2.5 Exhaust	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457
25.16	PM2.5 Dust	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162
34.62	PM2.5 Total	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619
49817.73	CO2	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731
1.05	CH4	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043
1.08	N2O	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072

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Table 42: Daily Controlled Emissions

Max	Pollutant	7/7/2028	7/8/2028	7/9/2028	7/10/2028	7/11/2028	7/12/2028	7/13/2028	7/14/2028	7/15/2028	7/16/2028	7/17/2028	7/18/2028	7/19/2028	7/20/2028	7/21/2028	7/22/2028	7/23/2028	7/24/2028	7/25/2028	7/26/2028	7/27/2028	7/28/2028	7/29/2028	7/30/2028	7/31/2028	8/1/2028	8/2/2028	8/3/2028	8/4/2028	8/5/2028	8/6/2028
44.26	ROG	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261
127.53	NOX	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526
165.17	CO	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172
0.82	SO2	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822
21.94	PM10 Exhaust	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941
57.09	PM10 Dust	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093
79.03	PM10 Total	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034
9.46	PM2.5 Exhaust	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457
8.29	PM2.5 Dust	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293
17.75	PM2.5 Total	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750
49817.73	CO2	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731
1.05	CH4	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043
1.08	N2O	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	8/7/2028	8/8/2028	8/9/2028	8/10/2028	8/11/2028	8/12/2028	8/13/2028	8/14/2028	8/15/2028	8/16/2028	8/17/2028	8/18/2028	8/19/2028	8/20/2028	8/21/2028	8/22/2028	8/23/2028	8/24/2028	8/25/2028	8/26/2028	8/27/2028	8/28/2028	8/29/2028	8/30/2028	8/31/2028	9/1/2028	9/2/2028	9/3/2028	9/4/2028	9/5/2028	9/6/2028
44.26	ROG	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	13.419	16.476	16.476	16.476	16.476	16.476
127.53	NOX	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	58.964	84.427	84.427	84.427	84.427	84.427
165.17	CO	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	79.698	102.355	102.355	102.355	102.355	102.355
0.82	SO2	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.260	0.333	0.333	0.333	0.333	0.333
21.94	PM10 Exhaust	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	3.593	4.988	4.988	4.988	4.988	4.988
201.26	PM10 Dust	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	201.259	141.969	172.235	172.235	172.235	172.235	172.235
223.20	PM10 Total	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	223.200	145.562	177.224	177.224	177.224	177.224	177.224
9.46	PM2.5 Exhaust	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	2.057	3.277	3.277	3.277	3.277	3.277
25.16	PM2.5 Dust	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	25.162	14.913	18.082	18.082	18.082	18.082	18.082
34.62	PM2.5 Total	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	34.619	16.969	21.359	21.359	21.359	21.359	21.359
49817.73	CO2	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	22437.894	30156.614	30156.614	30156.614	30156.614	30156.614
1.05	CH4	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	0.629	0.891	0.891	0.891	0.891	0.891
1.08	N2O	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	0.763	0.982	0.982	0.982	0.982	0.982

max max max max max max max max max max max max max max max max max max max max max max max max max

Table 42: Daily Controlled Emissions

Max	Pollutant	8/7/2028	8/8/2028	8/9/2028	8/10/2028	8/11/2028	8/12/2028	8/13/2028	8/14/2028	8/15/2028	8/16/2028	8/17/2028	8/18/2028	8/19/2028	8/20/2028	8/21/2028	8/22/2028	8/23/2028	8/24/2028	8/25/2028	8/26/2028	8/27/2028	8/28/2028	8/29/2028	8/30/2028	8/31/2028	9/1/2028	9/2/2028	9/3/2028	9/4/2028	9/5/2028	9/6/2028
44.26	ROG	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	44.261	13.419	16.476	16.476	16.476	16.476	16.476
127.53	NOX	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	127.526	58.964	84.427	84.427	84.427	84.427	84.427
165.17	CO	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	165.172	79.698	102.355	102.355	102.355	102.355	102.355
0.82	SO2	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.822	0.260	0.333	0.333	0.333	0.333	0.333
21.94	PM10 Exhaust	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	21.941	3.593	4.988	4.988	4.988	4.988	4.988
57.09	PM10 Dust	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	57.093	39.491	47.860	47.860	47.860	47.860	47.860
79.03	PM10 Total	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	79.034	43.084	52.848	52.848	52.848	52.848	52.848
9.46	PM2.5 Exhaust	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	9.457	2.057	3.277	3.277	3.277	3.277	3.277
8.29	PM2.5 Dust	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293	4.687	5.671	5.671	5.671	5.671	5.671
17.75	PM2.5 Total	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	17.750	6.743	8.948	8.948	8.948	8.948	8.948
49817.73	CO2	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	49817.731	22437.894	30156.614	30156.614	30156.614	30156.614	30156.614
1.05	CH4	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	1.043	0.629	0.891	0.891	0.891	0.891	0.891
1.08	N2O	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	0.763	0.982	0.982	0.982	0.982	0.982

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	9/7/2028	9/8/2028	9/9/2028	9/10/2028	9/11/2028	9/12/2028	9/13/2028	9/14/2028	9/15/2028	9/16/2028	9/17/2028	9/18/2028	9/19/2028	9/20/2028	9/21/2028	9/22/2028	9/23/2028	9/24/2028	9/25/2028	9/26/2028	9/27/2028	9/28/2028	9/29/2028	9/30/2028	10/1/2028	10/2/2028	10/3/2028	10/4/2028	10/5/2028	10/6/2028	10/7/2028
44.26	ROG	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	15.179	15.179	15.179	15.179	15.179	15.179	15.179
127.53	NOX	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	75.125	75.125	75.125	75.125	75.125	75.125	75.125
165.17	CO	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	89.524	89.524	89.524	89.524	89.524	89.524	89.524
0.82	SO2	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.302	0.302	0.302	0.302	0.302	0.302	0.302
21.94	PM10 Exhaust	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.720	4.720	4.720	4.720	4.720	4.720	4.720
201.26	PM10 Dust	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	172.235	166.119	166.119	166.119	166.119	166.119	166.119	166.119
223.20	PM10 Total	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	177.224	170.838	170.838	170.838	170.838	170.838	170.838	170.838
9.46	PM2.5 Exhaust	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.039	3.039	3.039	3.039	3.039	3.039	3.039
25.16	PM2.5 Dust	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	18.082	17.432	17.432	17.432	17.432	17.432	17.432	17.432
34.62	PM2.5 Total	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	21.359	20.471	20.471	20.471	20.471	20.471	20.471	20.471
49817.73	CO2	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043
1.05	CH4	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.781	0.781	0.781	0.781	0.781	0.781	0.781
1.08	N2O	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.954	0.954	0.954	0.954	0.954	0.954	0.954

Table 42: Daily Controlled Emissions

Max	Pollutant	9/7/2028	9/8/2028	9/9/2028	9/10/2028	9/11/2028	9/12/2028	9/13/2028	9/14/2028	9/15/2028	9/16/2028	9/17/2028	9/18/2028	9/19/2028	9/20/2028	9/21/2028	9/22/2028	9/23/2028	9/24/2028	9/25/2028	9/26/2028	9/27/2028	9/28/2028	9/29/2028	9/30/2028	10/1/2028	10/2/2028	10/3/2028	10/4/2028	10/5/2028	10/6/2028	10/7/2028
44.26	ROG	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	16.476	15.179	15.179	15.179	15.179	15.179	15.179	15.179
127.53	NOX	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	84.427	75.125	75.125	75.125	75.125	75.125	75.125	75.125
165.17	CO	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	102.355	89.524	89.524	89.524	89.524	89.524	89.524	89.524
0.82	SO2	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.302	0.302	0.302	0.302	0.302	0.302	0.302
21.94	PM10 Exhaust	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.988	4.720	4.720	4.720	4.720	4.720	4.720	4.720
57.09	PM10 Dust	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	47.860	46.123	46.123	46.123	46.123	46.123	46.123	46.123
79.03	PM10 Total	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	52.848	50.842	50.842	50.842	50.842	50.842	50.842	50.842
9.46	PM2.5 Exhaust	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.277	3.039	3.039	3.039	3.039	3.039	3.039	3.039
8.29	PM2.5 Dust	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.671	5.458	5.458	5.458	5.458	5.458	5.458	5.458
17.75	PM2.5 Total	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.948	8.497	8.497	8.497	8.497	8.497	8.497	8.497
49817.73	CO2	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	30156.614	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043
1.05	CH4	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.891	0.781	0.781	0.781	0.781	0.781	0.781	0.781
1.08	N2O	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.954	0.954	0.954	0.954	0.954	0.954	0.954

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	10/8/2028	10/9/2028	10/10/2028	10/11/2028	10/12/2028	10/13/2028	10/14/2028	10/15/2028	10/16/2028	10/17/2028	10/18/2028	10/19/2028	10/20/2028	10/21/2028	10/22/2028	10/23/2028	10/24/2028	10/25/2028	10/26/2028	10/27/2028	10/28/2028	10/29/2028	10/30/2028	10/31/2028	11/1/2028	11/2/2028	11/3/2028	11/4/2028	11/5/2028	11/6/2028	11/7/2028
44.26	ROG	15.179	15.179	15.179	15.179	15.179	15.179	15.179	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582
127.53	NOX	75.125	75.125	75.125	75.125	75.125	75.125	75.125	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306
165.17	CO	89.524	89.524	89.524	89.524	89.524	89.524	89.524	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026
0.82	SO2	0.302	0.302	0.302	0.302	0.302	0.302	0.302	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
21.94	PM10 Exhaust	4.720	4.720	4.720	4.720	4.720	4.720	4.720	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219
201.26	PM10 Dust	166.119	166.119	166.119	166.119	166.119	166.119	166.119	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678
223.20	PM10 Total	170.838	170.838	170.838	170.838	170.838	170.838	170.838	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896
9.46	PM2.5 Exhaust	3.039	3.039	3.039	3.039	3.039	3.039	3.039	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684
25.16	PM2.5 Dust	17.432	17.432	17.432	17.432	17.432	17.432	17.432	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840
34.62	PM2.5 Total	20.471	20.471	20.471	20.471	20.471	20.471	20.471	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524
49817.73	CO2	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877
1.05	CH4	0.781	0.781	0.781	0.781	0.781	0.781	0.781	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
1.08	N2O	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910

Table 42: Daily Controlled Emissions

Max	Pollutant	10/8/2028	10/9/2028	10/10/2028	10/11/2028	10/12/2028	10/13/2028	10/14/2028	10/15/2028	10/16/2028	10/17/2028	10/18/2028	10/19/2028	10/20/2028	10/21/2028	10/22/2028	10/23/2028	10/24/2028	10/25/2028	10/26/2028	10/27/2028	10/28/2028	10/29/2028	10/30/2028	10/31/2028	11/1/2028	11/2/2028	11/3/2028	11/4/2028	11/5/2028	11/6/2028	11/7/2028
44.26	ROG	15.179	15.179	15.179	15.179	15.179	15.179	15.179	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582
127.53	NOX	75.125	75.125	75.125	75.125	75.125	75.125	75.125	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306
165.17	CO	89.524	89.524	89.524	89.524	89.524	89.524	89.524	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026
0.82	SO2	0.302	0.302	0.302	0.302	0.302	0.302	0.302	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
21.94	PM10 Exhaust	4.720	4.720	4.720	4.720	4.720	4.720	4.720	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219
57.09	PM10 Dust	46.123	46.123	46.123	46.123	46.123	46.123	46.123	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199
79.03	PM10 Total	50.842	50.842	50.842	50.842	50.842	50.842	50.842	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418
9.46	PM2.5 Exhaust	3.039	3.039	3.039	3.039	3.039	3.039	3.039	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684
8.29	PM2.5 Dust	5.458	5.458	5.458	5.458	5.458	5.458	5.458	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614
17.75	PM2.5 Total	8.497	8.497	8.497	8.497	8.497	8.497	8.497	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298
49817.73	CO2	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043	27301.043	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877
1.05	CH4	0.781	0.781	0.781	0.781	0.781	0.781	0.781	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
1.08	N2O	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	11/8/2028	11/9/2028	11/10/2028	11/11/2028	11/12/2028	11/13/2028	11/14/2028	11/15/2028	11/16/2028	11/17/2028	11/18/2028	11/19/2028	11/20/2028	11/21/2028	11/22/2028	11/23/2028	11/24/2028	11/25/2028	11/26/2028	11/27/2028	11/28/2028	11/29/2028	11/30/2028	12/1/2028	12/2/2028	12/3/2028	12/4/2028	12/5/2028	12/6/2028	12/7/2028	12/8/2028
44.26	ROG	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582
127.53	NOX	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306
165.17	CO	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026
0.82	SO2	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
21.94	PM10 Exhaust	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219
201.26	PM10 Dust	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678
223.20	PM10 Total	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896
9.46	PM2.5 Exhaust	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684
25.16	PM2.5 Dust	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840
34.62	PM2.5 Total	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524
49817.73	CO2	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877
1.05	CH4	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
1.08	N2O	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910

Table 42: Daily Controlled Emissions

Max	Pollutant	11/8/2028	11/9/2028	11/10/2028	11/11/2028	11/12/2028	11/13/2028	11/14/2028	11/15/2028	11/16/2028	11/17/2028	11/18/2028	11/19/2028	11/20/2028	11/21/2028	11/22/2028	11/23/2028	11/24/2028	11/25/2028	11/26/2028	11/27/2028	11/28/2028	11/29/2028	11/30/2028	12/1/2028	12/2/2028	12/3/2028	12/4/2028	12/5/2028	12/6/2028	12/7/2028	12/8/2028
44.26	ROG	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582
127.53	NOX	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306
165.17	CO	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026
0.82	SO2	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
21.94	PM10 Exhaust	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219
57.09	PM10 Dust	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199
79.03	PM10 Total	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418
9.46	PM2.5 Exhaust	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684
8.29	PM2.5 Dust	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614
17.75	PM2.5 Total	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298
49817.73	CO2	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877
1.05	CH4	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
1.08	N2O	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	12/9/2028	12/10/2028	12/11/2028	12/12/2028	12/13/2028	12/14/2028	12/15/2028	12/16/2028	12/17/2028	12/18/2028	12/19/2028	12/20/2028	12/21/2028	12/22/2028	12/23/2028	12/24/2028	12/25/2028	12/26/2028	12/27/2028	12/28/2028	12/29/2028	12/30/2028	12/31/2028	1/1/2029	1/2/2029	1/3/2029	1/4/2029	1/5/2029	1/6/2029	1/7/2029	1/8/2029
44.26	ROG	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582
127.53	NOX	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306
165.17	CO	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026
0.82	SO2	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
21.94	PM10 Exhaust	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219
201.26	PM10 Dust	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678
223.20	PM10 Total	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896
9.46	PM2.5 Exhaust	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684
25.16	PM2.5 Dust	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840
34.62	PM2.5 Total	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524
49817.73	CO2	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877
1.05	CH4	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
1.08	N2O	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910

Table 42: Daily Controlled Emissions

Max	Pollutant	12/9/2028	12/10/2028	12/11/2028	12/12/2028	12/13/2028	12/14/2028	12/15/2028	12/16/2028	12/17/2028	12/18/2028	12/19/2028	12/20/2028	12/21/2028	12/22/2028	12/23/2028	12/24/2028	12/25/2028	12/26/2028	12/27/2028	12/28/2028	12/29/2028	12/30/2028	12/31/2028	1/1/2029	1/2/2029	1/3/2029	1/4/2029	1/5/2029	1/6/2029	1/7/2029	1/8/2029
44.26	ROG	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582
127.53	NOX	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306
165.17	CO	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026
0.82	SO2	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
21.94	PM10 Exhaust	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219
57.09	PM10 Dust	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199
79.03	PM10 Total	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418
9.46	PM2.5 Exhaust	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684
8.29	PM2.5 Dust	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614
17.75	PM2.5 Total	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298
49817.73	CO2	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877
1.05	CH4	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
1.08	N2O	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	1/9/2029	1/10/2029	1/11/2029	1/12/2029	1/13/2029	1/14/2029	1/15/2029	1/16/2029	1/17/2029	1/18/2029	1/19/2029	1/20/2029	1/21/2029	1/22/2029	1/23/2029	1/24/2029	1/25/2029	1/26/2029	1/27/2029	1/28/2029	1/29/2029	1/30/2029	1/31/2029	2/1/2029	2/2/2029	2/3/2029	2/4/2029	2/5/2029	2/6/2029	2/7/2029	2/8/2029
44.26	ROG	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	5.668	5.668	5.668	5.668	5.668	5.668
127.53	NOX	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	43.433	43.433	43.433	43.433	43.433	43.433
165.17	CO	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	55.130	55.130	55.130	55.130	55.130	55.130
0.82	SO2	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.137	0.137	0.137	0.137	0.137	0.137
21.94	PM10 Exhaust	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	2.081	2.081	2.081	2.081	2.081	2.081
201.26	PM10 Dust	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	141.678	70.540	70.540	70.540	70.540	70.540	70.540
223.20	PM10 Total	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	144.896	72.620	72.620	72.620	72.620	72.620	72.620
9.46	PM2.5 Exhaust	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	1.780	1.780	1.780	1.780	1.780	1.780
25.16	PM2.5 Dust	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	14.840	7.389	7.389	7.389	7.389	7.389	7.389
34.62	PM2.5 Total	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	17.524	9.169	9.169	9.169	9.169	9.169	9.169
49817.73	CO2	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439
1.05	CH4	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.452	0.452	0.452	0.452	0.452	0.452
1.08	N2O	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.447	0.447	0.447	0.447	0.447	0.447

Table 42: Daily Controlled Emissions

Max	Pollutant	1/9/2029	1/10/2029	1/11/2029	1/12/2029	1/13/2029	1/14/2029	1/15/2029	1/16/2029	1/17/2029	1/18/2029	1/19/2029	1/20/2029	1/21/2029	1/22/2029	1/23/2029	1/24/2029	1/25/2029	1/26/2029	1/27/2029	1/28/2029	1/29/2029	1/30/2029	1/31/2029	2/1/2029	2/2/2029	2/3/2029	2/4/2029	2/5/2029	2/6/2029	2/7/2029	2/8/2029
44.26	ROG	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	8.582	5.668	5.668	5.668	5.668	5.668	5.668
127.53	NOX	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	66.306	43.433	43.433	43.433	43.433	43.433	43.433
165.17	CO	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	82.026	55.130	55.130	55.130	55.130	55.130	55.130
0.82	SO2	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.137	0.137	0.137	0.137	0.137	0.137
21.94	PM10 Exhaust	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	3.219	2.081	2.081	2.081	2.081	2.081	2.081
57.09	PM10 Dust	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	39.199	19.519	19.519	19.519	19.519	19.519	19.519
79.03	PM10 Total	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	42.418	21.600	21.600	21.600	21.600	21.600	21.600
9.46	PM2.5 Exhaust	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	2.684	1.780	1.780	1.780	1.780	1.780	1.780
8.29	PM2.5 Dust	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	4.614	2.298	2.298	2.298	2.298	2.298	2.298
17.75	PM2.5 Total	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	7.298	4.078	4.078	4.078	4.078	4.078	4.078
49817.73	CO2	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	24070.877	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439
1.05	CH4	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.452	0.452	0.452	0.452	0.452	0.452
1.08	N2O	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.447	0.447	0.447	0.447	0.447	0.447

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	2/9/2029	2/10/2029	2/11/2029	2/12/2029	2/13/2029	2/14/2029	2/15/2029	2/16/2029	2/17/2029	2/18/2029	2/19/2029	2/20/2029	2/21/2029	2/22/2029	2/23/2029	2/24/2029	2/25/2029	2/26/2029	2/27/2029	2/28/2029	3/1/2029	3/2/2029	3/3/2029	3/4/2029	3/5/2029	3/6/2029	3/7/2029	3/8/2029	3/9/2029	3/10/2029	3/11/2029
44.26	ROG	5.668	5.668	5.668	5.668	5.668	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657
127.53	NOX	43.433	43.433	43.433	43.433	43.433	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127
165.17	CO	55.130	55.130	55.130	55.130	55.130	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036
0.82	SO2	0.137	0.137	0.137	0.137	0.137	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259
21.94	PM10 Exhaust	2.081	2.081	2.081	2.081	2.081	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587
201.26	PM10 Dust	70.540	70.540	70.540	70.540	70.540	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075
223.20	PM10 Total	72.620	72.620	72.620	72.620	72.620	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662
9.46	PM2.5 Exhaust	1.780	1.780	1.780	1.780	1.780	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046
25.16	PM2.5 Dust	7.389	7.389	7.389	7.389	7.389	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010
34.62	PM2.5 Total	9.169	9.169	9.169	9.169	9.169	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056
49817.73	CO2	13769.439	13769.439	13769.439	13769.439	13769.439	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297
1.05	CH4	0.452	0.452	0.452	0.452	0.452	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707
1.08	N2O	0.447	0.447	0.447	0.447	0.447	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605

Table 42: Daily Controlled Emissions

Max	Pollutant	2/9/2029	2/10/2029	2/11/2029	2/12/2029	2/13/2029	2/14/2029	2/15/2029	2/16/2029	2/17/2029	2/18/2029	2/19/2029	2/20/2029	2/21/2029	2/22/2029	2/23/2029	2/24/2029	2/25/2029	2/26/2029	2/27/2029	2/28/2029	3/1/2029	3/2/2029	3/3/2029	3/4/2029	3/5/2029	3/6/2029	3/7/2029	3/8/2029	3/9/2029	3/10/2029	3/11/2029
44.26	ROG	5.668	5.668	5.668	5.668	5.668	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657
127.53	NOX	43.433	43.433	43.433	43.433	43.433	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127
165.17	CO	55.130	55.130	55.130	55.130	55.130	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036
0.82	SO2	0.137	0.137	0.137	0.137	0.137	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259
21.94	PM10 Exhaust	2.081	2.081	2.081	2.081	2.081	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587
57.09	PM10 Dust	19.519	19.519	19.519	19.519	19.519	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092
79.03	PM10 Total	21.600	21.600	21.600	21.600	21.600	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679
9.46	PM2.5 Exhaust	1.780	1.780	1.780	1.780	1.780	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046
8.29	PM2.5 Dust	2.298	2.298	2.298	2.298	2.298	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428
17.75	PM2.5 Total	4.078	4.078	4.078	4.078	4.078	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473
49817.73	CO2	13769.439	13769.439	13769.439	13769.439	13769.439	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297
1.05	CH4	0.452	0.452	0.452	0.452	0.452	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707
1.08	N2O	0.447	0.447	0.447	0.447	0.447	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	3/12/2029	3/13/2029	3/14/2029	3/15/2029	3/16/2029	3/17/2029	3/18/2029	3/19/2029	3/20/2029	3/21/2029	3/22/2029	3/23/2029	3/24/2029	3/25/2029	3/26/2029	3/27/2029	3/28/2029	3/29/2029	3/30/2029	3/31/2029	4/1/2029	4/2/2029	4/3/2029	4/4/2029	4/5/2029	4/6/2029	4/7/2029	4/8/2029	4/9/2029	4/10/2029	4/11/2029
44.26	ROG	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657
127.53	NOX	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127
165.17	CO	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036
0.82	SO2	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259
21.94	PM10 Exhaust	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587
201.26	PM10 Dust	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075
223.20	PM10 Total	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662
9.46	PM2.5 Exhaust	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046
25.16	PM2.5 Dust	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010
34.62	PM2.5 Total	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056
49817.73	CO2	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297
1.05	CH4	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707
1.08	N2O	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605

Table 42: Daily Controlled Emissions

Max	Pollutant	3/12/2029	3/13/2029	3/14/2029	3/15/2029	3/16/2029	3/17/2029	3/18/2029	3/19/2029	3/20/2029	3/21/2029	3/22/2029	3/23/2029	3/24/2029	3/25/2029	3/26/2029	3/27/2029	3/28/2029	3/29/2029	3/30/2029	3/31/2029	4/1/2029	4/2/2029	4/3/2029	4/4/2029	4/5/2029	4/6/2029	4/7/2029	4/8/2029	4/9/2029	4/10/2029	4/11/2029
44.26	ROG	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657
127.53	NOX	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127
165.17	CO	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036
0.82	SO2	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259
21.94	PM10 Exhaust	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587
57.09	PM10 Dust	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092
79.03	PM10 Total	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679
9.46	PM2.5 Exhaust	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046
8.29	PM2.5 Dust	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428
17.75	PM2.5 Total	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473
49817.73	CO2	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297
1.05	CH4	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707
1.08	N2O	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	4/12/2029	4/13/2029	4/14/2029	4/15/2029	4/16/2029	4/17/2029	4/18/2029	4/19/2029	4/20/2029	4/21/2029	4/22/2029	4/23/2029	4/24/2029	4/25/2029	4/26/2029	4/27/2029	4/28/2029	4/29/2029	4/30/2029	5/1/2029	5/2/2029	5/3/2029	5/4/2029	5/5/2029	5/6/2029	5/7/2029	5/8/2029	5/9/2029	5/10/2029	5/11/2029	5/12/2029
44.26	ROG	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657
127.53	NOX	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127
165.17	CO	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036
0.82	SO2	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259
21.94	PM10 Exhaust	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587
201.26	PM10 Dust	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075	105.075
223.20	PM10 Total	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662	109.662
9.46	PM2.5 Exhaust	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046
25.16	PM2.5 Dust	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010	11.010
34.62	PM2.5 Total	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056	14.056
49817.73	CO2	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297
1.05	CH4	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707
1.08	N2O	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605

Table 42: Daily Controlled Emissions

Max	Pollutant	4/12/2029	4/13/2029	4/14/2029	4/15/2029	4/16/2029	4/17/2029	4/18/2029	4/19/2029	4/20/2029	4/21/2029	4/22/2029	4/23/2029	4/24/2029	4/25/2029	4/26/2029	4/27/2029	4/28/2029	4/29/2029	4/30/2029	5/1/2029	5/2/2029	5/3/2029	5/4/2029	5/5/2029	5/6/2029	5/7/2029	5/8/2029	5/9/2029	5/10/2029	5/11/2029	5/12/2029
44.26	ROG	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657	14.657
127.53	NOX	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127	75.127
165.17	CO	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036	78.036
0.82	SO2	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259
21.94	PM10 Exhaust	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587	4.587
57.09	PM10 Dust	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092	29.092
79.03	PM10 Total	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679	33.679
9.46	PM2.5 Exhaust	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046	3.046
8.29	PM2.5 Dust	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428	3.428
17.75	PM2.5 Total	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473	6.473
49817.73	CO2	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297	22924.297
1.05	CH4	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707
1.08	N2O	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605	0.605

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	5/13/2029	5/14/2029	5/15/2029	5/16/2029	5/17/2029	5/18/2029	5/19/2029	5/20/2029	5/21/2029	5/22/2029	5/23/2029	5/24/2029	5/25/2029	5/26/2029	5/27/2029	5/28/2029	5/29/2029	5/30/2029	5/31/2029	6/1/2029	6/2/2029	6/3/2029	6/4/2029	6/5/2029	6/6/2029	6/7/2029	6/8/2029	6/9/2029	6/10/2029	6/11/2029	6/12/2029
44.26	ROG	14.657	14.657	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153
127.53	NOX	75.127	75.127	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659
165.17	CO	78.036	78.036	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192
0.82	SO2	0.259	0.259	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256
21.94	PM10 Exhaust	4.587	4.587	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506
201.26	PM10 Dust	105.075	105.075	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	70.540	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652
223.20	PM10 Total	109.662	109.662	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	72.620	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158
9.46	PM2.5 Exhaust	3.046	3.046	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963
25.16	PM2.5 Dust	11.010	11.010	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	7.389	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785
34.62	PM2.5 Total	14.056	14.056	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	9.169	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748
49817.73	CO2	22924.297	22924.297	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271
1.05	CH4	0.707	0.707	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813
1.08	N2O	0.605	0.605	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941

Table 42: Daily Controlled Emissions

Max	Pollutant	5/13/2029	5/14/2029	5/15/2029	5/16/2029	5/17/2029	5/18/2029	5/19/2029	5/20/2029	5/21/2029	5/22/2029	5/23/2029	5/24/2029	5/25/2029	5/26/2029	5/27/2029	5/28/2029	5/29/2029	5/30/2029	5/31/2029	6/1/2029	6/2/2029	6/3/2029	6/4/2029	6/5/2029	6/6/2029	6/7/2029	6/8/2029	6/9/2029	6/10/2029	6/11/2029	6/12/2029
44.26	ROG	14.657	14.657	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	5.668	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153
127.53	NOX	75.127	75.127	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	43.433	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659
165.17	CO	78.036	78.036	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	55.130	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192
0.82	SO2	0.259	0.259	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256
21.94	PM10 Exhaust	4.587	4.587	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	2.081	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506
57.09	PM10 Dust	29.092	29.092	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	19.519	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906
79.03	PM10 Total	33.679	33.679	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	21.600	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412
9.46	PM2.5 Exhaust	3.046	3.046	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	1.780	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963
8.29	PM2.5 Dust	3.428	3.428	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	2.298	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089
17.75	PM2.5 Total	6.473	6.473	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	4.078	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052
49817.73	CO2	22924.297	22924.297	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	13769.439	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271
1.05	CH4	0.707	0.707	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.452	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813
1.08	N2O	0.605	0.605	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	6/13/2029	6/14/2029	6/15/2029	6/16/2029	6/17/2029	6/18/2029	6/19/2029	6/20/2029	6/21/2029	6/22/2029	6/23/2029	6/24/2029	6/25/2029	6/26/2029	6/27/2029	6/28/2029	6/29/2029	6/30/2029	7/1/2029	7/2/2029	7/3/2029	7/4/2029	7/5/2029	7/6/2029	7/7/2029	7/8/2029	7/9/2029	7/10/2029	7/11/2029	7/12/2029	7/13/2029
44.26	ROG	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213
127.53	NOX	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023
165.17	CO	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894
0.82	SO2	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
21.94	PM10 Exhaust	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332
201.26	PM10 Dust	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	131.652	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893
223.20	PM10 Total	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	135.158	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225
9.46	PM2.5 Exhaust	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693
25.16	PM2.5 Dust	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	15.785	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589
34.62	PM2.5 Total	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	18.748	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282
49817.73	CO2	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688
1.05	CH4	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054
1.08	N2O	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077

Table 42: Daily Controlled Emissions

Max	Pollutant	6/13/2029	6/14/2029	6/15/2029	6/16/2029	6/17/2029	6/18/2029	6/19/2029	6/20/2029	6/21/2029	6/22/2029	6/23/2029	6/24/2029	6/25/2029	6/26/2029	6/27/2029	6/28/2029	6/29/2029	6/30/2029	7/1/2029	7/2/2029	7/3/2029	7/4/2029	7/5/2029	7/6/2029	7/7/2029	7/8/2029	7/9/2029	7/10/2029	7/11/2029	7/12/2029	7/13/2029
44.26	ROG	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	10.153	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213
127.53	NOX	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	78.659	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023
165.17	CO	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	100.192	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894
0.82	SO2	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
21.94	PM10 Exhaust	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	3.506	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332
57.09	PM10 Dust	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	36.906	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665
79.03	PM10 Total	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	40.412	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997
9.46	PM2.5 Exhaust	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	2.963	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693
8.29	PM2.5 Dust	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.089	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647
17.75	PM2.5 Total	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	8.052	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341
49817.73	CO2	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	25447.271	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688
1.05	CH4	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	0.813	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054
1.08	N2O	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	0.941	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	7/14/2029	7/15/2029	7/16/2029	7/17/2029	7/18/2029	7/19/2029	7/20/2029	7/21/2029	7/22/2029	7/23/2029	7/24/2029	7/25/2029	7/26/2029	7/27/2029	7/28/2029	7/29/2029	7/30/2029	7/31/2029	8/1/2029	8/2/2029	8/3/2029	8/4/2029	8/5/2029	8/6/2029	8/7/2029	8/8/2029	8/9/2029	8/10/2029	8/11/2029	8/12/2029	8/13/2029
44.26	ROG	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213
127.53	NOX	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023
165.17	CO	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894
0.82	SO2	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
21.94	PM10 Exhaust	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332
201.26	PM10 Dust	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893
223.20	PM10 Total	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225
9.46	PM2.5 Exhaust	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693
25.16	PM2.5 Dust	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589
34.62	PM2.5 Total	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282
49817.73	CO2	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688
1.05	CH4	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054
1.08	N2O	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077

Table 42: Daily Controlled Emissions

Max	Pollutant	7/14/2029	7/15/2029	7/16/2029	7/17/2029	7/18/2029	7/19/2029	7/20/2029	7/21/2029	7/22/2029	7/23/2029	7/24/2029	7/25/2029	7/26/2029	7/27/2029	7/28/2029	7/29/2029	7/30/2029	7/31/2029	8/1/2029	8/2/2029	8/3/2029	8/4/2029	8/5/2029	8/6/2029	8/7/2029	8/8/2029	8/9/2029	8/10/2029	8/11/2029	8/12/2029	8/13/2029
44.26	ROG	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213
127.53	NOX	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023
165.17	CO	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894
0.82	SO2	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
21.94	PM10 Exhaust	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332
57.09	PM10 Dust	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665
79.03	PM10 Total	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997
9.46	PM2.5 Exhaust	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693
8.29	PM2.5 Dust	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647
17.75	PM2.5 Total	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341
49817.73	CO2	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688
1.05	CH4	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054
1.08	N2O	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	8/14/2029	8/15/2029	8/16/2029	8/17/2029	8/18/2029	8/19/2029	8/20/2029	8/21/2029	8/22/2029	8/23/2029	8/24/2029	8/25/2029	8/26/2029	8/27/2029	8/28/2029	8/29/2029	8/30/2029	8/31/2029	9/1/2029	9/2/2029	9/3/2029	9/4/2029	9/5/2029	9/6/2029	9/7/2029	9/8/2029	9/9/2029	9/10/2029	9/11/2029	9/12/2029	9/13/2029
44.26	ROG	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151
127.53	NOX	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518
165.17	CO	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549
0.82	SO2	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304
21.94	PM10 Exhaust	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655
201.26	PM10 Dust	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	148.893	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841
223.20	PM10 Total	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	153.225	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496
9.46	PM2.5 Exhaust	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122
25.16	PM2.5 Dust	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	17.589	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763
34.62	PM2.5 Total	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	21.282	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885
49817.73	CO2	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304
1.05	CH4	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009
1.08	N2O	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852

Table 42: Daily Controlled Emissions

Max	Pollutant	8/14/2029	8/15/2029	8/16/2029	8/17/2029	8/18/2029	8/19/2029	8/20/2029	8/21/2029	8/22/2029	8/23/2029	8/24/2029	8/25/2029	8/26/2029	8/27/2029	8/28/2029	8/29/2029	8/30/2029	8/31/2029	9/1/2029	9/2/2029	9/3/2029	9/4/2029	9/5/2029	9/6/2029	9/7/2029	9/8/2029	9/9/2029	9/10/2029	9/11/2029	9/12/2029	9/13/2029
44.26	ROG	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	13.213	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151
127.53	NOX	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	101.023	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518
165.17	CO	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	131.894	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549
0.82	SO2	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304
21.94	PM10 Exhaust	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	4.332	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655
57.09	PM10 Dust	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	41.665	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525
79.03	PM10 Total	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	45.997	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180
9.46	PM2.5 Exhaust	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.693	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122
8.29	PM2.5 Dust	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.647	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412
17.75	PM2.5 Total	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	9.341	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534
49817.73	CO2	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	31981.688	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304
1.05	CH4	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009
1.08	N2O	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	9/14/2029	9/15/2029	9/16/2029	9/17/2029	9/18/2029	9/19/2029	9/20/2029	9/21/2029	9/22/2029	9/23/2029	9/24/2029	9/25/2029	9/26/2029	9/27/2029	9/28/2029	9/29/2029	9/30/2029	10/1/2029	10/2/2029	10/3/2029	10/4/2029	10/5/2029	10/6/2029	10/7/2029	10/8/2029	10/9/2029	10/10/2029	10/11/2029	10/12/2029	10/13/2029	10/14/2029
44.26	ROG	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151
127.53	NOX	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518
165.17	CO	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549
0.82	SO2	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304
21.94	PM10 Exhaust	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655
201.26	PM10 Dust	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841
223.20	PM10 Total	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496
9.46	PM2.5 Exhaust	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122
25.16	PM2.5 Dust	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763
34.62	PM2.5 Total	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885
49817.73	CO2	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304
1.05	CH4	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009
1.08	N2O	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852

Table 42: Daily Controlled Emissions

Max	Pollutant	9/14/2029	9/15/2029	9/16/2029	9/17/2029	9/18/2029	9/19/2029	9/20/2029	9/21/2029	9/22/2029	9/23/2029	9/24/2029	9/25/2029	9/26/2029	9/27/2029	9/28/2029	9/29/2029	9/30/2029	10/1/2029	10/2/2029	10/3/2029	10/4/2029	10/5/2029	10/6/2029	10/7/2029	10/8/2029	10/9/2029	10/10/2029	10/11/2029	10/12/2029	10/13/2029	10/14/2029
44.26	ROG	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151
127.53	NOX	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518
165.17	CO	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549
0.82	SO2	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304
21.94	PM10 Exhaust	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655
57.09	PM10 Dust	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525
79.03	PM10 Total	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180
9.46	PM2.5 Exhaust	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122
8.29	PM2.5 Dust	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412
17.75	PM2.5 Total	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534
49817.73	CO2	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304
1.05	CH4	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009
1.08	N2O	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	10/15/2029	10/16/2029	10/17/2029	10/18/2029	10/19/2029	10/20/2029	10/21/2029	10/22/2029	10/23/2029	10/24/2029	10/25/2029	10/26/2029	10/27/2029	10/28/2029	10/29/2029	10/30/2029	10/31/2029	11/1/2029	11/2/2029	11/3/2029	11/4/2029	11/5/2029	11/6/2029	11/7/2029	11/8/2029	11/9/2029	11/10/2029	11/11/2029	11/12/2029	11/13/2029	11/14/2029
44.26	ROG	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162
127.53	NOX	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367
165.17	CO	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333
0.82	SO2	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266
21.94	PM10 Exhaust	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
201.26	PM10 Dust	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	140.841	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739
223.20	PM10 Total	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	144.496	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983
9.46	PM2.5 Exhaust	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816
25.16	PM2.5 Dust	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	16.763	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088
34.62	PM2.5 Total	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	19.885	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904
49817.73	CO2	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790
1.05	CH4	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909
1.08	N2O	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608

Table 42: Daily Controlled Emissions

Max	Pollutant	10/15/2029	10/16/2029	10/17/2029	10/18/2029	10/19/2029	10/20/2029	10/21/2029	10/22/2029	10/23/2029	10/24/2029	10/25/2029	10/26/2029	10/27/2029	10/28/2029	10/29/2029	10/30/2029	10/31/2029	11/1/2029	11/2/2029	11/3/2029	11/4/2029	11/5/2029	11/6/2029	11/7/2029	11/8/2029	11/9/2029	11/10/2029	11/11/2029	11/12/2029	11/13/2029	11/14/2029
44.26	ROG	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	12.151	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162
127.53	NOX	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	91.518	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367
165.17	CO	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	128.549	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333
0.82	SO2	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.304	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266
21.94	PM10 Exhaust	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.655	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
57.09	PM10 Dust	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	39.525	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318
79.03	PM10 Total	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	43.180	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562
9.46	PM2.5 Exhaust	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	3.122	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816
8.29	PM2.5 Dust	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	5.412	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462
17.75	PM2.5 Total	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	8.534	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279
49817.73	CO2	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	29610.304	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790
1.05	CH4	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	1.009	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909
1.08	N2O	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.852	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	11/15/2029	11/16/2029	11/17/2029	11/18/2029	11/19/2029	11/20/2029	11/21/2029	11/22/2029	11/23/2029	11/24/2029	11/25/2029	11/26/2029	11/27/2029	11/28/2029	11/29/2029	11/30/2029	12/1/2029	12/2/2029	12/3/2029	12/4/2029	12/5/2029	12/6/2029	12/7/2029	12/8/2029	12/9/2029	12/10/2029	12/11/2029	12/12/2029	12/13/2029	12/14/2029
44.26	ROG	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162
127.53	NOX	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367
165.17	CO	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333
0.82	SO2	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266
21.94	PM10 Exhaust	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
201.26	PM10 Dust	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739
223.20	PM10 Total	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983
9.46	PM2.5 Exhaust	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816
25.16	PM2.5 Dust	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088
34.62	PM2.5 Total	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904
49817.73	CO2	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790
1.05	CH4	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909
1.08	N2O	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608

Table 42: Daily Controlled Emissions

Max	Pollutant	11/15/2029	11/16/2029	11/17/2029	11/18/2029	11/19/2029	11/20/2029	11/21/2029	11/22/2029	11/23/2029	11/24/2029	11/25/2029	11/26/2029	11/27/2029	11/28/2029	11/29/2029	11/30/2029	12/1/2029	12/2/2029	12/3/2029	12/4/2029	12/5/2029	12/6/2029	12/7/2029	12/8/2029	12/9/2029	12/10/2029	12/11/2029	12/12/2029	12/13/2029	12/14/2029
44.26	ROG	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162
127.53	NOX	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367
165.17	CO	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333
0.82	SO2	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266
21.94	PM10 Exhaust	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
57.09	PM10 Dust	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318
79.03	PM10 Total	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562
9.46	PM2.5 Exhaust	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816
8.29	PM2.5 Dust	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462
17.75	PM2.5 Total	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279
49817.73	CO2	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790
1.05	CH4	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909
1.08	N2O	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	12/15/2029	12/16/2029	12/17/2029	12/18/2029	12/19/2029	12/20/2029	12/21/2029	12/22/2029	12/23/2029	12/24/2029	12/25/2029	12/26/2029	12/27/2029	12/28/2029	12/29/2029	12/30/2029	12/31/2029	1/1/2030	1/2/2030	1/3/2030	1/4/2030	1/5/2030	1/6/2030	1/7/2030	1/8/2030	1/9/2030	1/10/2030	1/11/2030	1/12/2030	1/13/2030	1/14/2030	1/15/2030
44.26	ROG	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162
127.53	NOX	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367
165.17	CO	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333
0.82	SO2	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266
21.94	PM10 Exhaust	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
201.26	PM10 Dust	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739
223.20	PM10 Total	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983
9.46	PM2.5 Exhaust	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816
25.16	PM2.5 Dust	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088
34.62	PM2.5 Total	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904
49817.73	CO2	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790
1.05	CH4	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909
1.08	N2O	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608

Table 42: Daily Controlled Emissions

Max	Pollutant	12/15/2029	12/16/2029	12/17/2029	12/18/2029	12/19/2029	12/20/2029	12/21/2029	12/22/2029	12/23/2029	12/24/2029	12/25/2029	12/26/2029	12/27/2029	12/28/2029	12/29/2029	12/30/2029	12/31/2029	1/1/2030	1/2/2030	1/3/2030	1/4/2030	1/5/2030	1/6/2030	1/7/2030	1/8/2030	1/9/2030	1/10/2030	1/11/2030	1/12/2030	1/13/2030	1/14/2030	1/15/2030
44.26	ROG	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162
127.53	NOX	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367
165.17	CO	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333
0.82	SO2	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266
21.94	PM10 Exhaust	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244
57.09	PM10 Dust	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318
79.03	PM10 Total	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562
9.46	PM2.5 Exhaust	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816
8.29	PM2.5 Dust	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462
17.75	PM2.5 Total	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279
49817.73	CO2	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790
1.05	CH4	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909
1.08	N2O	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	1/16/2030	1/17/2030	1/18/2030	1/19/2030	1/20/2030	1/21/2030	1/22/2030	1/23/2030	1/24/2030	1/25/2030	1/26/2030	1/27/2030	1/28/2030	1/29/2030	1/30/2030	1/31/2030	2/1/2030	2/2/2030	2/3/2030	2/4/2030	2/5/2030	2/6/2030	2/7/2030	2/8/2030	2/9/2030	2/10/2030	2/11/2030	2/12/2030	2/13/2030	2/14/2030	2/15/2030	2/16/2030	2/17/2030	2/18/2030
44.26	ROG	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666
127.53	NOX	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292
165.17	CO	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487
0.82	SO2	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184
21.94	PM10 Exhaust	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230
201.26	PM10 Dust	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	105.739	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728
223.20	PM10 Total	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	108.983	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958
9.46	PM2.5 Exhaust	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940
25.16	PM2.5 Dust	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	11.088	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367
34.62	PM2.5 Total	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	13.904	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307
49817.73	CO2	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472
1.05	CH4	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648
1.08	N2O	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359

Table 42: Daily Controlled Emissions

Max	Pollutant	1/16/2030	1/17/2030	1/18/2030	1/19/2030	1/20/2030	1/21/2030	1/22/2030	1/23/2030	1/24/2030	1/25/2030	1/26/2030	1/27/2030	1/28/2030	1/29/2030	1/30/2030	1/31/2030	2/1/2030	2/2/2030	2/3/2030	2/4/2030	2/5/2030	2/6/2030	2/7/2030	2/8/2030	2/9/2030	2/10/2030	2/11/2030	2/12/2030	2/13/2030	2/14/2030	2/15/2030	2/16/2030	2/17/2030	2/18/2030
44.26	ROG	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	11.162	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666
127.53	NOX	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	82.367	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292
165.17	CO	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	118.333	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487
0.82	SO2	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184
21.94	PM10 Exhaust	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	3.244	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230
57.09	PM10 Dust	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	29.318	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139
79.03	PM10 Total	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	32.562	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368
9.46	PM2.5 Exhaust	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	2.816	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940
8.29	PM2.5 Dust	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	3.462	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620
17.75	PM2.5 Total	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	6.279	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560
49817.73	CO2	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	25601.790	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472
1.05	CH4	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.909	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648
1.08	N2O	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.608	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	2/19/2030	2/20/2030	2/21/2030	2/22/2030	2/23/2030	2/24/2030	2/25/2030	2/26/2030	2/27/2030	2/28/2030	3/1/2030	3/2/2030	3/3/2030	3/4/2030	3/5/2030	3/6/2030	3/7/2030	3/8/2030	3/9/2030	3/10/2030	3/11/2030	3/12/2030	3/13/2030	3/14/2030	3/15/2030	3/16/2030	3/17/2030	3/18/2030	3/19/2030	3/20/2030	3/21/2030	3/22/2030	3/23/2030	3/24/2030
44.26	ROG	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	79.728	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	81.958	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	8.367	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	10.307	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	2/19/2030	2/20/2030	2/21/2030	2/22/2030	2/23/2030	2/24/2030	2/25/2030	2/26/2030	2/27/2030	2/28/2030	3/1/2030	3/2/2030	3/3/2030	3/4/2030	3/5/2030	3/6/2030	3/7/2030	3/8/2030	3/9/2030	3/10/2030	3/11/2030	3/12/2030	3/13/2030	3/14/2030	3/15/2030	3/16/2030	3/17/2030	3/18/2030	3/19/2030	3/20/2030	3/21/2030	3/22/2030	3/23/2030	3/24/2030
44.26	ROG	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	7.666	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	56.292	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	83.487	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	2.230	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	22.139	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	24.368	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.940	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.620	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	4.560	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	17932.472	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.648	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.359	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	3/25/2030	3/26/2030	3/27/2030	3/28/2030	3/29/2030	3/30/2030	3/31/2030	4/1/2030	4/2/2030	4/3/2030	4/4/2030	4/5/2030	4/6/2030	4/7/2030	4/8/2030	4/9/2030	4/10/2030	4/11/2030	4/12/2030	4/13/2030	4/14/2030	4/15/2030	4/16/2030	4/17/2030	4/18/2030	4/19/2030	4/20/2030	4/21/2030	4/22/2030	4/23/2030	4/24/2030	4/25/2030	4/26/2030	4/27/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	3/25/2030	3/26/2030	3/27/2030	3/28/2030	3/29/2030	3/30/2030	3/31/2030	4/1/2030	4/2/2030	4/3/2030	4/4/2030	4/5/2030	4/6/2030	4/7/2030	4/8/2030	4/9/2030	4/10/2030	4/11/2030	4/12/2030	4/13/2030	4/14/2030	4/15/2030	4/16/2030	4/17/2030	4/18/2030	4/19/2030	4/20/2030	4/21/2030	4/22/2030	4/23/2030	4/24/2030	4/25/2030	4/26/2030	4/27/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	4/28/2030	4/29/2030	4/30/2030	5/1/2030	5/2/2030	5/3/2030	5/4/2030	5/5/2030	5/6/2030	5/7/2030	5/8/2030	5/9/2030	5/10/2030	5/11/2030	5/12/2030	5/13/2030	5/14/2030	5/15/2030	5/16/2030	5/17/2030	5/18/2030	5/19/2030	5/20/2030	5/21/2030	5/22/2030	5/23/2030	5/24/2030	5/25/2030	5/26/2030	5/27/2030	5/28/2030	5/29/2030	5/30/2030	5/31/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	4/28/2030	4/29/2030	4/30/2030	5/1/2030	5/2/2030	5/3/2030	5/4/2030	5/5/2030	5/6/2030	5/7/2030	5/8/2030	5/9/2030	5/10/2030	5/11/2030	5/12/2030	5/13/2030	5/14/2030	5/15/2030	5/16/2030	5/17/2030	5/18/2030	5/19/2030	5/20/2030	5/21/2030	5/22/2030	5/23/2030	5/24/2030	5/25/2030	5/26/2030	5/27/2030	5/28/2030	5/29/2030	5/30/2030	5/31/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	6/1/2030	6/2/2030	6/3/2030	6/4/2030	6/5/2030	6/6/2030	6/7/2030	6/8/2030	6/9/2030	6/10/2030	6/11/2030	6/12/2030	6/13/2030	6/14/2030	6/15/2030	6/16/2030	6/17/2030	6/18/2030	6/19/2030	6/20/2030	6/21/2030	6/22/2030	6/23/2030	6/24/2030	6/25/2030	6/26/2030	6/27/2030	6/28/2030	6/29/2030	6/30/2030	7/1/2030	7/2/2030	7/3/2030	7/4/2030	7/5/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	6/1/2030	6/2/2030	6/3/2030	6/4/2030	6/5/2030	6/6/2030	6/7/2030	6/8/2030	6/9/2030	6/10/2030	6/11/2030	6/12/2030	6/13/2030	6/14/2030	6/15/2030	6/16/2030	6/17/2030	6/18/2030	6/19/2030	6/20/2030	6/21/2030	6/22/2030	6/23/2030	6/24/2030	6/25/2030	6/26/2030	6/27/2030	6/28/2030	6/29/2030	6/30/2030	7/1/2030	7/2/2030	7/3/2030	7/4/2030	7/5/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	7/6/2030	7/7/2030	7/8/2030	7/9/2030	7/10/2030	7/11/2030	7/12/2030	7/13/2030	7/14/2030	7/15/2030	7/16/2030	7/17/2030	7/18/2030	7/19/2030	7/20/2030	7/21/2030	7/22/2030	7/23/2030	7/24/2030	7/25/2030	7/26/2030	7/27/2030	7/28/2030	7/29/2030	7/30/2030	7/31/2030	8/1/2030	8/2/2030	8/3/2030	8/4/2030	8/5/2030	8/6/2030	8/7/2030	8/8/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	7/6/2030	7/7/2030	7/8/2030	7/9/2030	7/10/2030	7/11/2030	7/12/2030	7/13/2030	7/14/2030	7/15/2030	7/16/2030	7/17/2030	7/18/2030	7/19/2030	7/20/2030	7/21/2030	7/22/2030	7/23/2030	7/24/2030	7/25/2030	7/26/2030	7/27/2030	7/28/2030	7/29/2030	7/30/2030	7/31/2030	8/1/2030	8/2/2030	8/3/2030	8/4/2030	8/5/2030	8/6/2030	8/7/2030	8/8/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	8/9/2030	8/10/2030	8/11/2030	8/12/2030	8/13/2030	8/14/2030	8/15/2030	8/16/2030	8/17/2030	8/18/2030	8/19/2030	8/20/2030	8/21/2030	8/22/2030	8/23/2030	8/24/2030	8/25/2030	8/26/2030	8/27/2030	8/28/2030	8/29/2030	8/30/2030	8/31/2030	9/1/2030	9/2/2030	9/3/2030	9/4/2030	9/5/2030	9/6/2030	9/7/2030	9/8/2030	9/9/2030	9/10/2030	9/11/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	8/9/2030	8/10/2030	8/11/2030	8/12/2030	8/13/2030	8/14/2030	8/15/2030	8/16/2030	8/17/2030	8/18/2030	8/19/2030	8/20/2030	8/21/2030	8/22/2030	8/23/2030	8/24/2030	8/25/2030	8/26/2030	8/27/2030	8/28/2030	8/29/2030	8/30/2030	8/31/2030	9/1/2030	9/2/2030	9/3/2030	9/4/2030	9/5/2030	9/6/2030	9/7/2030	9/8/2030	9/9/2030	9/10/2030	9/11/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	9/12/2030	9/13/2030	9/14/2030	9/15/2030	9/16/2030	9/17/2030	9/18/2030	9/19/2030	9/20/2030	9/21/2030	9/22/2030	9/23/2030	9/24/2030	9/25/2030	9/26/2030	9/27/2030	9/28/2030	9/29/2030	9/30/2030	10/1/2030	10/2/2030	10/3/2030	10/4/2030	10/5/2030	10/6/2030	10/7/2030	10/8/2030	10/9/2030	10/10/2030	10/11/2030	10/12/2030	10/13/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	9/12/2030	9/13/2030	9/14/2030	9/15/2030	9/16/2030	9/17/2030	9/18/2030	9/19/2030	9/20/2030	9/21/2030	9/22/2030	9/23/2030	9/24/2030	9/25/2030	9/26/2030	9/27/2030	9/28/2030	9/29/2030	9/30/2030	10/1/2030	10/2/2030	10/3/2030	10/4/2030	10/5/2030	10/6/2030	10/7/2030	10/8/2030	10/9/2030	10/10/2030	10/11/2030	10/12/2030	10/13/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	10/14/2030	10/15/2030	10/16/2030	10/17/2030	10/18/2030	10/19/2030	10/20/2030	10/21/2030	10/22/2030	10/23/2030	10/24/2030	10/25/2030	10/26/2030	10/27/2030	10/28/2030	10/29/2030	10/30/2030	10/31/2030	11/1/2030	11/2/2030	11/3/2030	11/4/2030	11/5/2030	11/6/2030	11/7/2030	11/8/2030	11/9/2030	11/10/2030	11/11/2030	11/12/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 42: Daily Controlled Emissions

Max	Pollutant	10/14/2030	10/15/2030	10/16/2030	10/17/2030	10/18/2030	10/19/2030	10/20/2030	10/21/2030	10/22/2030	10/23/2030	10/24/2030	10/25/2030	10/26/2030	10/27/2030	10/28/2030	10/29/2030	10/30/2030	10/31/2030	11/1/2030	11/2/2030	11/3/2030	11/4/2030	11/5/2030	11/6/2030	11/7/2030	11/8/2030	11/9/2030	11/10/2030	11/11/2030	11/12/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	11/13/2030	11/14/2030	11/15/2030	11/16/2030	11/17/2030	11/18/2030	11/19/2030	11/20/2030	11/21/2030	11/22/2030	11/23/2030	11/24/2030	11/25/2030	11/26/2030	11/27/2030	11/28/2030	11/29/2030	11/30/2030	12/1/2030	12/2/2030	12/3/2030	12/4/2030	12/5/2030	12/6/2030	12/7/2030	12/8/2030	12/9/2030	12/10/2030	12/11/2030	12/12/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651
201.26	PM10 Dust	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	69.827	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459
223.20	PM10 Total	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	71.418	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381
25.16	PM2.5 Dust	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	7.343	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274
34.62	PM2.5 Total	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	8.713	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395

Table 42: Daily Controlled Emissions

Max	Pollutant	11/13/2030	11/14/2030	11/15/2030	11/16/2030	11/17/2030	11/18/2030	11/19/2030	11/20/2030	11/21/2030	11/22/2030	11/23/2030	11/24/2030	11/25/2030	11/26/2030	11/27/2030	11/28/2030	11/29/2030	11/30/2030	12/1/2030	12/2/2030	12/3/2030	12/4/2030	12/5/2030	12/6/2030	12/7/2030	12/8/2030	12/9/2030	12/10/2030	12/11/2030	12/12/2030
44.26	ROG	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.155	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135
127.53	NOX	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.138	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342
165.17	CO	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	56.205	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779
0.82	SO2	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139
21.94	PM10 Exhaust	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.591	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651
57.09	PM10 Dust	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	19.464	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519
79.03	PM10 Total	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	21.055	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170
9.46	PM2.5 Exhaust	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.370	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381
8.29	PM2.5 Dust	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.317	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894
17.75	PM2.5 Total	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	3.687	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275
49817.73	CO2	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	12769.440	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698
1.05	CH4	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457
1.08	N2O	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.239	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	12/13/2030	12/14/2030	12/15/2030	12/16/2030	12/17/2030	12/18/2030	12/19/2030	12/20/2030	12/21/2030	12/22/2030	12/23/2030	12/24/2030	12/25/2030	12/26/2030	12/27/2030	12/28/2030	12/29/2030	12/30/2030	12/31/2030	1/1/2031	1/2/2031	1/3/2031	1/4/2031	1/5/2031	1/6/2031	1/7/2031	1/8/2031	1/9/2031	1/10/2031	1/11/2031	1/12/2031	1/13/2031
44.26	ROG	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135
127.53	NOX	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342
165.17	CO	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779
0.82	SO2	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139
21.94	PM10 Exhaust	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651
201.26	PM10 Dust	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459
223.20	PM10 Total	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110
9.46	PM2.5 Exhaust	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381
25.16	PM2.5 Dust	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274
34.62	PM2.5 Total	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656
49817.73	CO2	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698
1.05	CH4	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457
1.08	N2O	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395

Table 42: Daily Controlled Emissions

Max	Pollutant	12/13/2030	12/14/2030	12/15/2030	12/16/2030	12/17/2030	12/18/2030	12/19/2030	12/20/2030	12/21/2030	12/22/2030	12/23/2030	12/24/2030	12/25/2030	12/26/2030	12/27/2030	12/28/2030	12/29/2030	12/30/2030	12/31/2030	1/1/2031	1/2/2031	1/3/2031	1/4/2031	1/5/2031	1/6/2031	1/7/2031	1/8/2031	1/9/2031	1/10/2031	1/11/2031	1/12/2031	1/13/2031
44.26	ROG	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135
127.53	NOX	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342
165.17	CO	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779
0.82	SO2	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139
21.94	PM10 Exhaust	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651
57.09	PM10 Dust	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519
79.03	PM10 Total	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170
9.46	PM2.5 Exhaust	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381
8.29	PM2.5 Dust	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894
17.75	PM2.5 Total	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275
49817.73	CO2	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698
1.05	CH4	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457
1.08	N2O	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	1/14/2031	1/15/2031	1/16/2031	1/17/2031	1/18/2031	1/19/2031	1/20/2031	1/21/2031	1/22/2031	1/23/2031	1/24/2031	1/25/2031	1/26/2031	1/27/2031	1/28/2031	1/29/2031	1/30/2031	1/31/2031	2/1/2031	2/2/2031	2/3/2031	2/4/2031	2/5/2031	2/6/2031	2/7/2031	2/8/2031	2/9/2031	2/10/2031	2/11/2031	2/12/2031	2/13/2031	2/14/2031	2/15/2031	2/16/2031
44.26	ROG	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109
127.53	NOX	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302
165.17	CO	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448
0.82	SO2	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
21.94	PM10 Exhaust	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220
201.26	PM10 Dust	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	88.459	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847
223.20	PM10 Total	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	90.110	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066
9.46	PM2.5 Exhaust	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
25.16	PM2.5 Dust	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	9.274	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112
34.62	PM2.5 Total	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	10.656	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129
49817.73	CO2	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836
1.05	CH4	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332
1.08	N2O	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294

Table 42: Daily Controlled Emissions

Max	Pollutant	1/14/2031	1/15/2031	1/16/2031	1/17/2031	1/18/2031	1/19/2031	1/20/2031	1/21/2031	1/22/2031	1/23/2031	1/24/2031	1/25/2031	1/26/2031	1/27/2031	1/28/2031	1/29/2031	1/30/2031	1/31/2031	2/1/2031	2/2/2031	2/3/2031	2/4/2031	2/5/2031	2/6/2031	2/7/2031	2/8/2031	2/9/2031	2/10/2031	2/11/2031	2/12/2031	2/13/2031	2/14/2031	2/15/2031	2/16/2031
44.26	ROG	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	5.135	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109
127.53	NOX	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	38.342	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302
165.17	CO	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	59.779	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448
0.82	SO2	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
21.94	PM10 Exhaust	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.651	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220
57.09	PM10 Dust	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	24.519	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797
79.03	PM10 Total	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	26.170	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017
9.46	PM2.5 Exhaust	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
8.29	PM2.5 Dust	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.894	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217
17.75	PM2.5 Total	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	4.275	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235
49817.73	CO2	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	13797.698	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836
1.05	CH4	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.457	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332
1.08	N2O	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.395	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	2/17/2031	2/18/2031	2/19/2031	2/20/2031	2/21/2031	2/22/2031	2/23/2031	2/24/2031	2/25/2031	2/26/2031	2/27/2031	2/28/2031	3/1/2031	3/2/2031	3/3/2031	3/4/2031	3/5/2031	3/6/2031	3/7/2031	3/8/2031	3/9/2031	3/10/2031	3/11/2031	3/12/2031	3/13/2031	3/14/2031	3/15/2031	3/16/2031	3/17/2031	3/18/2031	3/19/2031	3/20/2031	3/21/2031	3/22/2031
44.26	ROG	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109
127.53	NOX	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302
165.17	CO	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448
0.82	SO2	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
21.94	PM10 Exhaust	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220
201.26	PM10 Dust	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847
223.20	PM10 Total	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066
9.46	PM2.5 Exhaust	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
25.16	PM2.5 Dust	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112
34.62	PM2.5 Total	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129
49817.73	CO2	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836
1.05	CH4	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332
1.08	N2O	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294

Table 42: Daily Controlled Emissions

Max	Pollutant	2/17/2031	2/18/2031	2/19/2031	2/20/2031	2/21/2031	2/22/2031	2/23/2031	2/24/2031	2/25/2031	2/26/2031	2/27/2031	2/28/2031	3/1/2031	3/2/2031	3/3/2031	3/4/2031	3/5/2031	3/6/2031	3/7/2031	3/8/2031	3/9/2031	3/10/2031	3/11/2031	3/12/2031	3/13/2031	3/14/2031	3/15/2031	3/16/2031	3/17/2031	3/18/2031	3/19/2031	3/20/2031	3/21/2031	3/22/2031
44.26	ROG	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109
127.53	NOX	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302
165.17	CO	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448
0.82	SO2	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097
21.94	PM10 Exhaust	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220
57.09	PM10 Dust	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797
79.03	PM10 Total	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017
9.46	PM2.5 Exhaust	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018
8.29	PM2.5 Dust	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217
17.75	PM2.5 Total	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235
49817.73	CO2	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836
1.05	CH4	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332
1.08	N2O	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	3/23/2031	3/24/2031	3/25/2031	3/26/2031	3/27/2031	3/28/2031	3/29/2031	3/30/2031	3/31/2031	4/1/2031	4/2/2031	4/3/2031	4/4/2031	4/5/2031	4/6/2031	4/7/2031	4/8/2031	4/9/2031	4/10/2031	4/11/2031	4/12/2031	4/13/2031	4/14/2031	4/15/2031	4/16/2031	4/17/2031	4/18/2031	4/19/2031	4/20/2031	4/21/2031	4/22/2031	4/23/2031	4/24/2031	4/25/2031
44.26	ROG	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	2.579	2.579	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	19.888	19.888	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	28.454	28.454	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.074	0.074	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	0.972	0.972	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	67.847	67.847	67.847	67.847	67.847	67.847	67.847	67.847	41.875	41.875	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	69.066	69.066	69.066	69.066	69.066	69.066	69.066	69.066	42.847	42.847	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	0.846	0.846	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.112	4.400	4.400	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.129	8.129	8.129	8.129	8.129	8.129	8.129	8.129	5.246	5.246	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	7694.192	7694.192	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.282	0.282	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.122	0.122	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	3/23/2031	3/24/2031	3/25/2031	3/26/2031	3/27/2031	3/28/2031	3/29/2031	3/30/2031	3/31/2031	4/1/2031	4/2/2031	4/3/2031	4/4/2031	4/5/2031	4/6/2031	4/7/2031	4/8/2031	4/9/2031	4/10/2031	4/11/2031	4/12/2031	4/13/2031	4/14/2031	4/15/2031	4/16/2031	4/17/2031	4/18/2031	4/19/2031	4/20/2031	4/21/2031	4/22/2031	4/23/2031	4/24/2031	4/25/2031
44.26	ROG	3.109	3.109	3.109	3.109	3.109	3.109	3.109	3.109	2.579	2.579	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	24.302	24.302	24.302	24.302	24.302	24.302	24.302	24.302	19.888	19.888	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	36.448	36.448	36.448	36.448	36.448	36.448	36.448	36.448	28.454	28.454	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.097	0.074	0.074	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.220	1.220	1.220	1.220	1.220	1.220	1.220	1.220	0.972	0.972	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	18.797	18.797	18.797	18.797	18.797	18.797	18.797	18.797	11.657	11.657	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	20.017	20.017	20.017	20.017	20.017	20.017	20.017	20.017	12.629	12.629	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.018	1.018	1.018	1.018	1.018	1.018	1.018	1.018	0.846	0.846	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.217	2.217	2.217	2.217	2.217	2.217	2.217	2.217	1.385	1.385	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.235	3.235	3.235	3.235	3.235	3.235	3.235	3.235	2.231	2.231	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	10093.836	7694.192	7694.192	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.332	0.282	0.282	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.122	0.122	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	4/26/2031	4/27/2031	4/28/2031	4/29/2031	4/30/2031	5/1/2031	5/2/2031	5/3/2031	5/4/2031	5/5/2031	5/6/2031	5/7/2031	5/8/2031	5/9/2031	5/10/2031	5/11/2031	5/12/2031	5/13/2031	5/14/2031	5/15/2031	5/16/2031	5/17/2031	5/18/2031	5/19/2031	5/20/2031	5/21/2031	5/22/2031	5/23/2031	5/24/2031	5/25/2031	5/26/2031	5/27/2031	5/28/2031	5/29/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	4/26/2031	4/27/2031	4/28/2031	4/29/2031	4/30/2031	5/1/2031	5/2/2031	5/3/2031	5/4/2031	5/5/2031	5/6/2031	5/7/2031	5/8/2031	5/9/2031	5/10/2031	5/11/2031	5/12/2031	5/13/2031	5/14/2031	5/15/2031	5/16/2031	5/17/2031	5/18/2031	5/19/2031	5/20/2031	5/21/2031	5/22/2031	5/23/2031	5/24/2031	5/25/2031	5/26/2031	5/27/2031	5/28/2031	5/29/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	5/30/2031	5/31/2031	6/1/2031	6/2/2031	6/3/2031	6/4/2031	6/5/2031	6/6/2031	6/7/2031	6/8/2031	6/9/2031	6/10/2031	6/11/2031	6/12/2031	6/13/2031	6/14/2031	6/15/2031	6/16/2031	6/17/2031	6/18/2031	6/19/2031	6/20/2031	6/21/2031	6/22/2031	6/23/2031	6/24/2031	6/25/2031	6/26/2031	6/27/2031	6/28/2031	6/29/2031	6/30/2031	7/1/2031	7/2/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	5/30/2031	5/31/2031	6/1/2031	6/2/2031	6/3/2031	6/4/2031	6/5/2031	6/6/2031	6/7/2031	6/8/2031	6/9/2031	6/10/2031	6/11/2031	6/12/2031	6/13/2031	6/14/2031	6/15/2031	6/16/2031	6/17/2031	6/18/2031	6/19/2031	6/20/2031	6/21/2031	6/22/2031	6/23/2031	6/24/2031	6/25/2031	6/26/2031	6/27/2031	6/28/2031	6/29/2031	6/30/2031	7/1/2031	7/2/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	7/3/2031	7/4/2031	7/5/2031	7/6/2031	7/7/2031	7/8/2031	7/9/2031	7/10/2031	7/11/2031	7/12/2031	7/13/2031	7/14/2031	7/15/2031	7/16/2031	7/17/2031	7/18/2031	7/19/2031	7/20/2031	7/21/2031	7/22/2031	7/23/2031	7/24/2031	7/25/2031	7/26/2031	7/27/2031	7/28/2031	7/29/2031	7/30/2031	7/31/2031	8/1/2031	8/2/2031	8/3/2031	8/4/2031	8/5/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	7/3/2031	7/4/2031	7/5/2031	7/6/2031	7/7/2031	7/8/2031	7/9/2031	7/10/2031	7/11/2031	7/12/2031	7/13/2031	7/14/2031	7/15/2031	7/16/2031	7/17/2031	7/18/2031	7/19/2031	7/20/2031	7/21/2031	7/22/2031	7/23/2031	7/24/2031	7/25/2031	7/26/2031	7/27/2031	7/28/2031	7/29/2031	7/30/2031	7/31/2031	8/1/2031	8/2/2031	8/3/2031	8/4/2031	8/5/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	8/6/2031	8/7/2031	8/8/2031	8/9/2031	8/10/2031	8/11/2031	8/12/2031	8/13/2031	8/14/2031	8/15/2031	8/16/2031	8/17/2031	8/18/2031	8/19/2031	8/20/2031	8/21/2031	8/22/2031	8/23/2031	8/24/2031	8/25/2031	8/26/2031	8/27/2031	8/28/2031	8/29/2031	8/30/2031	8/31/2031	9/1/2031	9/2/2031	9/3/2031	9/4/2031	9/5/2031	9/6/2031	9/7/2031	9/8/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	8/6/2031	8/7/2031	8/8/2031	8/9/2031	8/10/2031	8/11/2031	8/12/2031	8/13/2031	8/14/2031	8/15/2031	8/16/2031	8/17/2031	8/18/2031	8/19/2031	8/20/2031	8/21/2031	8/22/2031	8/23/2031	8/24/2031	8/25/2031	8/26/2031	8/27/2031	8/28/2031	8/29/2031	8/30/2031	8/31/2031	9/1/2031	9/2/2031	9/3/2031	9/4/2031	9/5/2031	9/6/2031	9/7/2031	9/8/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	9/9/2031	9/10/2031	9/11/2031	9/12/2031	9/13/2031	9/14/2031	9/15/2031	9/16/2031	9/17/2031	9/18/2031	9/19/2031	9/20/2031	9/21/2031	9/22/2031	9/23/2031	9/24/2031	9/25/2031	9/26/2031	9/27/2031	9/28/2031	9/29/2031	9/30/2031	10/1/2031	10/2/2031	10/3/2031	10/4/2031	10/5/2031	10/6/2031	10/7/2031	10/8/2031	10/9/2031	10/10/2031	10/11/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	9/9/2031	9/10/2031	9/11/2031	9/12/2031	9/13/2031	9/14/2031	9/15/2031	9/16/2031	9/17/2031	9/18/2031	9/19/2031	9/20/2031	9/21/2031	9/22/2031	9/23/2031	9/24/2031	9/25/2031	9/26/2031	9/27/2031	9/28/2031	9/29/2031	9/30/2031	10/1/2031	10/2/2031	10/3/2031	10/4/2031	10/5/2031	10/6/2031	10/7/2031	10/8/2031	10/9/2031	10/10/2031	10/11/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	10/12/2031	10/13/2031	10/14/2031	10/15/2031	10/16/2031	10/17/2031	10/18/2031	10/19/2031	10/20/2031	10/21/2031	10/22/2031	10/23/2031	10/24/2031	10/25/2031	10/26/2031	10/27/2031	10/28/2031	10/29/2031	10/30/2031	10/31/2031	11/1/2031	11/2/2031	11/3/2031	11/4/2031	11/5/2031	11/6/2031	11/7/2031	11/8/2031	11/9/2031	11/10/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 42: Daily Controlled Emissions

Max	Pollutant	10/12/2031	10/13/2031	10/14/2031	10/15/2031	10/16/2031	10/17/2031	10/18/2031	10/19/2031	10/20/2031	10/21/2031	10/22/2031	10/23/2031	10/24/2031	10/25/2031	10/26/2031	10/27/2031	10/28/2031	10/29/2031	10/30/2031	10/31/2031	11/1/2031	11/2/2031	11/3/2031	11/4/2031	11/5/2031	11/6/2031	11/7/2031	11/8/2031	11/9/2031	11/10/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	11/11/2031	11/12/2031	11/13/2031	11/14/2031	11/15/2031	11/16/2031	11/17/2031	11/18/2031	11/19/2031	11/20/2031	11/21/2031	11/22/2031	11/23/2031	11/24/2031	11/25/2031	11/26/2031	11/27/2031	11/28/2031	11/29/2031	11/30/2031	12/1/2031	12/2/2031	12/3/2031	12/4/2031	12/5/2031	12/6/2031	12/7/2031	12/8/2031	12/9/2031	12/10/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972
201.26	PM10 Dust	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	64.828	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875
223.20	PM10 Total	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	66.604	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846
25.16	PM2.5 Dust	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	6.797	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400
34.62	PM2.5 Total	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	8.328	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122

Table 42: Daily Controlled Emissions

Max	Pollutant	11/11/2031	11/12/2031	11/13/2031	11/14/2031	11/15/2031	11/16/2031	11/17/2031	11/18/2031	11/19/2031	11/20/2031	11/21/2031	11/22/2031	11/23/2031	11/24/2031	11/25/2031	11/26/2031	11/27/2031	11/28/2031	11/29/2031	11/30/2031	12/1/2031	12/2/2031	12/3/2031	12/4/2031	12/5/2031	12/6/2031	12/7/2031	12/8/2031	12/9/2031	12/10/2031
44.26	ROG	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	4.080	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579
127.53	NOX	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	31.839	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888
165.17	CO	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	38.240	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454
0.82	SO2	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
21.94	PM10 Exhaust	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	1.776	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972
57.09	PM10 Dust	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	17.968	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657
79.03	PM10 Total	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	19.744	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629
9.46	PM2.5 Exhaust	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	1.532	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846
8.29	PM2.5 Dust	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	2.121	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385
17.75	PM2.5 Total	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	3.652	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231
49817.73	CO2	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	10133.601	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192
1.05	CH4	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282
1.08	N2O	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.317	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	12/11/2031	12/12/2031	12/13/2031	12/14/2031	12/15/2031	12/16/2031	12/17/2031	12/18/2031	12/19/2031	12/20/2031	12/21/2031	12/22/2031	12/23/2031	12/24/2031	12/25/2031	12/26/2031	12/27/2031	12/28/2031	12/29/2031	12/30/2031	12/31/2031	1/1/2032	1/2/2032	1/3/2032	1/4/2032	1/5/2032	1/6/2032	1/7/2032	1/8/2032	1/9/2032	1/10/2032
44.26	ROG	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	41.875	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	42.847	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	4.400	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	5.246	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	12/11/2031	12/12/2031	12/13/2031	12/14/2031	12/15/2031	12/16/2031	12/17/2031	12/18/2031	12/19/2031	12/20/2031	12/21/2031	12/22/2031	12/23/2031	12/24/2031	12/25/2031	12/26/2031	12/27/2031	12/28/2031	12/29/2031	12/30/2031	12/31/2031	1/1/2032	1/2/2032	1/3/2032	1/4/2032	1/5/2032	1/6/2032	1/7/2032	1/8/2032	1/9/2032	1/10/2032
44.26	ROG	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	2.579	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	19.888	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	28.454	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	11.657	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	12.629	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	0.846	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	1.385	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	2.231	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	7694.192	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.282	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	1/11/2032	1/12/2032	1/13/2032	1/14/2032	1/15/2032	1/16/2032	1/17/2032	1/18/2032	1/19/2032	1/20/2032	1/21/2032	1/22/2032	1/23/2032	1/24/2032	1/25/2032	1/26/2032	1/27/2032	1/28/2032	1/29/2032	1/30/2032	1/31/2032	2/1/2032	2/2/2032	2/3/2032	2/4/2032	2/5/2032	2/6/2032	2/7/2032	2/8/2032	2/9/2032	2/10/2032	2/11/2032	2/12/2032	2/13/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	1/11/2032	1/12/2032	1/13/2032	1/14/2032	1/15/2032	1/16/2032	1/17/2032	1/18/2032	1/19/2032	1/20/2032	1/21/2032	1/22/2032	1/23/2032	1/24/2032	1/25/2032	1/26/2032	1/27/2032	1/28/2032	1/29/2032	1/30/2032	1/31/2032	2/1/2032	2/2/2032	2/3/2032	2/4/2032	2/5/2032	2/6/2032	2/7/2032	2/8/2032	2/9/2032	2/10/2032	2/11/2032	2/12/2032	2/13/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	2/14/2032	2/15/2032	2/16/2032	2/17/2032	2/18/2032	2/19/2032	2/20/2032	2/21/2032	2/22/2032	2/23/2032	2/24/2032	2/25/2032	2/26/2032	2/27/2032	2/28/2032	2/29/2032	3/1/2032	3/2/2032	3/3/2032	3/4/2032	3/5/2032	3/6/2032	3/7/2032	3/8/2032	3/9/2032	3/10/2032	3/11/2032	3/12/2032	3/13/2032	3/14/2032	3/15/2032	3/16/2032	3/17/2032	3/18/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	2/14/2032	2/15/2032	2/16/2032	2/17/2032	2/18/2032	2/19/2032	2/20/2032	2/21/2032	2/22/2032	2/23/2032	2/24/2032	2/25/2032	2/26/2032	2/27/2032	2/28/2032	2/29/2032	3/1/2032	3/2/2032	3/3/2032	3/4/2032	3/5/2032	3/6/2032	3/7/2032	3/8/2032	3/9/2032	3/10/2032	3/11/2032	3/12/2032	3/13/2032	3/14/2032	3/15/2032	3/16/2032	3/17/2032	3/18/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	3/19/2032	3/20/2032	3/21/2032	3/22/2032	3/23/2032	3/24/2032	3/25/2032	3/26/2032	3/27/2032	3/28/2032	3/29/2032	3/30/2032	3/31/2032	4/1/2032	4/2/2032	4/3/2032	4/4/2032	4/5/2032	4/6/2032	4/7/2032	4/8/2032	4/9/2032	4/10/2032	4/11/2032	4/12/2032	4/13/2032	4/14/2032	4/15/2032	4/16/2032	4/17/2032	4/18/2032	4/19/2032	4/20/2032	4/21/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	3/19/2032	3/20/2032	3/21/2032	3/22/2032	3/23/2032	3/24/2032	3/25/2032	3/26/2032	3/27/2032	3/28/2032	3/29/2032	3/30/2032	3/31/2032	4/1/2032	4/2/2032	4/3/2032	4/4/2032	4/5/2032	4/6/2032	4/7/2032	4/8/2032	4/9/2032	4/10/2032	4/11/2032	4/12/2032	4/13/2032	4/14/2032	4/15/2032	4/16/2032	4/17/2032	4/18/2032	4/19/2032	4/20/2032	4/21/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	4/22/2032	4/23/2032	4/24/2032	4/25/2032	4/26/2032	4/27/2032	4/28/2032	4/29/2032	4/30/2032	5/1/2032	5/2/2032	5/3/2032	5/4/2032	5/5/2032	5/6/2032	5/7/2032	5/8/2032	5/9/2032	5/10/2032	5/11/2032	5/12/2032	5/13/2032	5/14/2032	5/15/2032	5/16/2032	5/17/2032	5/18/2032	5/19/2032	5/20/2032	5/21/2032	5/22/2032	5/23/2032	5/24/2032	5/25/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	4/22/2032	4/23/2032	4/24/2032	4/25/2032	4/26/2032	4/27/2032	4/28/2032	4/29/2032	4/30/2032	5/1/2032	5/2/2032	5/3/2032	5/4/2032	5/5/2032	5/6/2032	5/7/2032	5/8/2032	5/9/2032	5/10/2032	5/11/2032	5/12/2032	5/13/2032	5/14/2032	5/15/2032	5/16/2032	5/17/2032	5/18/2032	5/19/2032	5/20/2032	5/21/2032	5/22/2032	5/23/2032	5/24/2032	5/25/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	5/26/2032	5/27/2032	5/28/2032	5/29/2032	5/30/2032	5/31/2032	6/1/2032	6/2/2032	6/3/2032	6/4/2032	6/5/2032	6/6/2032	6/7/2032	6/8/2032	6/9/2032	6/10/2032	6/11/2032	6/12/2032	6/13/2032	6/14/2032	6/15/2032	6/16/2032	6/17/2032	6/18/2032	6/19/2032	6/20/2032	6/21/2032	6/22/2032	6/23/2032	6/24/2032	6/25/2032	6/26/2032	6/27/2032	6/28/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	5/26/2032	5/27/2032	5/28/2032	5/29/2032	5/30/2032	5/31/2032	6/1/2032	6/2/2032	6/3/2032	6/4/2032	6/5/2032	6/6/2032	6/7/2032	6/8/2032	6/9/2032	6/10/2032	6/11/2032	6/12/2032	6/13/2032	6/14/2032	6/15/2032	6/16/2032	6/17/2032	6/18/2032	6/19/2032	6/20/2032	6/21/2032	6/22/2032	6/23/2032	6/24/2032	6/25/2032	6/26/2032	6/27/2032	6/28/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	6/29/2032	6/30/2032	7/1/2032	7/2/2032	7/3/2032	7/4/2032	7/5/2032	7/6/2032	7/7/2032	7/8/2032	7/9/2032	7/10/2032	7/11/2032	7/12/2032	7/13/2032	7/14/2032	7/15/2032	7/16/2032	7/17/2032	7/18/2032	7/19/2032	7/20/2032	7/21/2032	7/22/2032	7/23/2032	7/24/2032	7/25/2032	7/26/2032	7/27/2032	7/28/2032	7/29/2032	7/30/2032	7/31/2032	8/1/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 42: Daily Controlled Emissions

Max	Pollutant	6/29/2032	6/30/2032	7/1/2032	7/2/2032	7/3/2032	7/4/2032	7/5/2032	7/6/2032	7/7/2032	7/8/2032	7/9/2032	7/10/2032	7/11/2032	7/12/2032	7/13/2032	7/14/2032	7/15/2032	7/16/2032	7/17/2032	7/18/2032	7/19/2032	7/20/2032	7/21/2032	7/22/2032	7/23/2032	7/24/2032	7/25/2032	7/26/2032	7/27/2032	7/28/2032	7/29/2032	7/30/2032	7/31/2032	8/1/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	8/2/2032	8/3/2032	8/4/2032	8/5/2032	8/6/2032	8/7/2032	8/8/2032	8/9/2032	8/10/2032	8/11/2032	8/12/2032	8/13/2032	8/14/2032	8/15/2032	8/16/2032	8/17/2032	8/18/2032	8/19/2032	8/20/2032	8/21/2032	8/22/2032	8/23/2032	8/24/2032	8/25/2032	8/26/2032	8/27/2032	8/28/2032	8/29/2032	8/30/2032	8/31/2032	9/1/2032	9/2/2032	9/3/2032	9/4/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	0.464	0.464	0.464	0.464
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	2.829	2.829	2.829	2.829
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	4.272	4.272	4.272	4.272
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.014	0.014	0.014	0.014
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	0.234	0.234	0.234	0.234
201.26	PM10 Dust	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	68.392	26.517	26.517	26.517	26.517
223.20	PM10 Total	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	69.599	26.751	26.751	26.751	26.751
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	0.186	0.186	0.186	0.186
25.16	PM2.5 Dust	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	7.160	2.760	2.760	2.760	2.760
34.62	PM2.5 Total	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	8.192	2.946	2.946	2.946	2.946
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	1446.851	1446.851	1446.851	1446.851
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.036	0.036	0.036	0.036
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.092	0.092	0.092	0.092

Table 42: Daily Controlled Emissions

Max	Pollutant	8/2/2032	8/3/2032	8/4/2032	8/5/2032	8/6/2032	8/7/2032	8/8/2032	8/9/2032	8/10/2032	8/11/2032	8/12/2032	8/13/2032	8/14/2032	8/15/2032	8/16/2032	8/17/2032	8/18/2032	8/19/2032	8/20/2032	8/21/2032	8/22/2032	8/23/2032	8/24/2032	8/25/2032	8/26/2032	8/27/2032	8/28/2032	8/29/2032	8/30/2032	8/31/2032	9/1/2032	9/2/2032	9/3/2032	9/4/2032
44.26	ROG	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	3.043	0.464	0.464	0.464	0.464
127.53	NOX	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	22.717	2.829	2.829	2.829	2.829
165.17	CO	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	32.726	4.272	4.272	4.272	4.272
0.82	SO2	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.014	0.014	0.014	0.014
21.94	PM10 Exhaust	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	1.206	0.234	0.234	0.234	0.234
57.09	PM10 Dust	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	18.905	7.248	7.248	7.248	7.248
79.03	PM10 Total	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	20.111	7.482	7.482	7.482	7.482
9.46	PM2.5 Exhaust	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	0.186	0.186	0.186	0.186
8.29	PM2.5 Dust	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	2.222	0.837	0.837	0.837	0.837
17.75	PM2.5 Total	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	3.254	1.023	1.023	1.023	1.023
49817.73	CO2	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	9141.044	1446.851	1446.851	1446.851	1446.851
1.05	CH4	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.318	0.036	0.036	0.036	0.036
1.08	N2O	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.213	0.092	0.092	0.092	0.092

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	9/5/2032	9/6/2032	9/7/2032	9/8/2032	9/9/2032	9/10/2032	9/11/2032	9/12/2032	9/13/2032	9/14/2032	9/15/2032	9/16/2032	9/17/2032	9/18/2032	9/19/2032	9/20/2032	9/21/2032	9/22/2032	9/23/2032	9/24/2032	9/25/2032	9/26/2032	9/27/2032	9/28/2032	9/29/2032	9/30/2032	10/1/2032	10/2/2032	10/3/2032	10/4/2032	10/5/2032	10/6/2032	10/7/2032	10/8/2032
44.26	ROG	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
127.53	NOX	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829
165.17	CO	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272
0.82	SO2	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
21.94	PM10 Exhaust	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
201.26	PM10 Dust	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517
223.20	PM10 Total	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751
9.46	PM2.5 Exhaust	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186
25.16	PM2.5 Dust	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760
34.62	PM2.5 Total	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946
49817.73	CO2	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851
1.05	CH4	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
1.08	N2O	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092

Table 42: Daily Controlled Emissions

Max	Pollutant	9/5/2032	9/6/2032	9/7/2032	9/8/2032	9/9/2032	9/10/2032	9/11/2032	9/12/2032	9/13/2032	9/14/2032	9/15/2032	9/16/2032	9/17/2032	9/18/2032	9/19/2032	9/20/2032	9/21/2032	9/22/2032	9/23/2032	9/24/2032	9/25/2032	9/26/2032	9/27/2032	9/28/2032	9/29/2032	9/30/2032	10/1/2032	10/2/2032	10/3/2032	10/4/2032	10/5/2032	10/6/2032	10/7/2032	10/8/2032
44.26	ROG	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
127.53	NOX	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829
165.17	CO	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272
0.82	SO2	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
21.94	PM10 Exhaust	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234
57.09	PM10 Dust	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248
79.03	PM10 Total	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482
9.46	PM2.5 Exhaust	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186
8.29	PM2.5 Dust	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837
17.75	PM2.5 Total	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023
49817.73	CO2	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851
1.05	CH4	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
1.08	N2O	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	10/9/2032	10/10/2032	10/11/2032	10/12/2032	10/13/2032	10/14/2032	10/15/2032	10/16/2032	10/17/2032	10/18/2032	10/19/2032	10/20/2032	10/21/2032	10/22/2032	10/23/2032	10/24/2032	10/25/2032	10/26/2032	10/27/2032	10/28/2032	10/29/2032	10/30/2032	10/31/2032	11/1/2032	11/2/2032	11/3/2032	11/4/2032	11/5/2032	11/6/2032	11/7/2032
44.26	ROG	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.53	NOX	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.17	CO	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.82	SO2	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.94	PM10 Exhaust	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000
201.26	PM10 Dust	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	26.517	0.000	0.000	0.000	0.000	0.000	0.000	0.000
223.20	PM10 Total	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	26.751	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.46	PM2.5 Exhaust	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.16	PM2.5 Dust	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	2.760	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34.62	PM2.5 Total	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	2.946	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49817.73	CO2	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.05	CH4	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.08	N2O	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 42: Daily Controlled Emissions

Max	Pollutant	10/9/2032	10/10/2032	10/11/2032	10/12/2032	10/13/2032	10/14/2032	10/15/2032	10/16/2032	10/17/2032	10/18/2032	10/19/2032	10/20/2032	10/21/2032	10/22/2032	10/23/2032	10/24/2032	10/25/2032	10/26/2032	10/27/2032	10/28/2032	10/29/2032	10/30/2032	10/31/2032	11/1/2032	11/2/2032	11/3/2032	11/4/2032	11/5/2032	11/6/2032	11/7/2032
44.26	ROG	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.53	NOX	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	2.829	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.17	CO	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	4.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.82	SO2	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.94	PM10 Exhaust	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57.09	PM10 Dust	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	7.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79.03	PM10 Total	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	7.482	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.46	PM2.5 Exhaust	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8.29	PM2.5 Dust	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.837	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.75	PM2.5 Total	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	1.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49817.73	CO2	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	1446.851	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.05	CH4	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.08	N2O	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	11/8/2032	11/9/2032	11/10/2032	11/11/2032	11/12/2032	11/13/2032	11/14/2032	11/15/2032	11/16/2032	11/17/2032	11/18/2032	11/19/2032	11/20/2032	11/21/2032	11/22/2032	11/23/2032	11/24/2032	11/25/2032	11/26/2032	11/27/2032	11/28/2032	11/29/2032	11/30/2032	12/1/2032	12/2/2032	12/3/2032	12/4/2032	12/5/2032	12/6/2032	12/7/2032
44.26	ROG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.53	NOX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.17	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.82	SO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.94	PM10 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
201.26	PM10 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
223.20	PM10 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.46	PM2.5 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.16	PM2.5 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34.62	PM2.5 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49817.73	CO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.05	CH4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.08	N2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 42: Daily Controlled Emissions

Max	Pollutant	11/8/2032	11/9/2032	11/10/2032	11/11/2032	11/12/2032	11/13/2032	11/14/2032	11/15/2032	11/16/2032	11/17/2032	11/18/2032	11/19/2032	11/20/2032	11/21/2032	11/22/2032	11/23/2032	11/24/2032	11/25/2032	11/26/2032	11/27/2032	11/28/2032	11/29/2032	11/30/2032	12/1/2032	12/2/2032	12/3/2032	12/4/2032	12/5/2032	12/6/2032	12/7/2032
44.26	ROG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.53	NOX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.17	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.82	SO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.94	PM10 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57.09	PM10 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79.03	PM10 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.46	PM2.5 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8.29	PM2.5 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.75	PM2.5 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49817.73	CO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.05	CH4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.08	N2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 41: Daily Uncontrolled Emissions

Max	Pollutant	12/8/2032	12/9/2032	12/10/2032	12/11/2032	12/12/2032	12/13/2032	12/14/2032	12/15/2032	12/16/2032	12/17/2032	12/18/2032	12/19/2032	12/20/2032	12/21/2032	12/22/2032	12/23/2032	12/24/2032	12/25/2032	12/26/2032	12/27/2032	12/28/2032	12/29/2032	12/30/2032	12/31/2032
44.26	ROG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.53	NOX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.17	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.82	SO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.94	PM10 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
201.26	PM10 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
223.20	PM10 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.46	PM2.5 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25.16	PM2.5 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34.62	PM2.5 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49817.73	CO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.05	CH4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.08	N2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 42: Daily Controlled Emissions

Max	Pollutant	12/8/2032	12/9/2032	12/10/2032	12/11/2032	12/12/2032	12/13/2032	12/14/2032	12/15/2032	12/16/2032	12/17/2032	12/18/2032	12/19/2032	12/20/2032	12/21/2032	12/22/2032	12/23/2032	12/24/2032	12/25/2032	12/26/2032	12/27/2032	12/28/2032	12/29/2032	12/30/2032	12/31/2032
44.26	ROG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.53	NOX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.17	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.82	SO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21.94	PM10 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
57.09	PM10 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
79.03	PM10 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.46	PM2.5 Exhaust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8.29	PM2.5 Dust	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17.75	PM2.5 Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
49817.73	CO2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.05	CH4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.08	N2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 43: Total Uncontrolled Annual Emissions (tons)

Index	Name	ROG	NOX	CO	SO2	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total	CO2	CH4	N2O
S-01	Survey and Staking	0.046	0.055	0.692	0.002	0.011	4.791	4.802	0.004	0.504	0.508	191.353	0.004	0.005
S-02	Utility Locates	1.020	7.329	11.580	0.020	0.216	6.050	6.267	0.187	0.634	0.821	1756.879	0.061	0.048
S-03	Mobilization	0.050	0.462	0.652	0.001	0.015	0.682	0.697	0.013	0.071	0.084	129.703	0.004	0.005
S-04	Access Road Construction	0.221	1.918	1.780	0.007	0.081	4.034	4.115	0.068	0.830	0.898	709.619	0.023	0.024
S-05	Conventional Structure Foundation Installation	0.290	2.442	2.761	0.010	0.116	6.287	6.403	0.092	0.659	0.751	1074.551	0.031	0.052
S-06	Conventional Structure Installation	0.126	0.851	1.092	0.004	0.047	3.735	3.781	0.037	0.391	0.428	404.295	0.012	0.015
S-07	Helicopter Support	0.775	0.985	0.711	0.008	0.176	2.190	2.366	0.040	0.232	0.272	341.612	0.002	0.004
S-08	Helicopter Landing Pad Construction	0.100	0.711	1.127	0.002	0.019	0.621	0.640	0.017	0.066	0.083	161.571	0.006	0.002
S-09	Helicopter Landing Platform Construction	0.132	0.944	1.302	0.003	0.027	0.621	0.648	0.024	0.066	0.090	289.840	0.011	0.003
S-10	Helicopter Site Preparation	2.810	3.544	5.055	0.050	1.965	0.742	2.707	0.738	0.078	0.817	1789.866	0.001	0.003
S-11	Helicopter Structure Foundation Installation	0.140	1.005	1.386	0.003	0.029	0.661	0.690	0.026	0.070	0.096	308.402	0.012	0.003
S-12	Helicopter Structure Installation	0.009	0.047	0.127	0.000	0.002	0.502	0.504	0.001	0.053	0.055	30.462	0.001	0.001
S-13	Conductor Installation	0.342	1.204	0.870	0.005	0.095	1.312	1.408	0.048	0.138	0.186	347.885	0.010	0.006
S-14	Excavate Trench	0.351	2.621	3.502	0.008	0.102	2.614	2.716	0.088	0.273	0.362	770.767	0.026	0.025
S-15	Duct Bank & Conduit Installation	0.304	2.225	3.154	0.007	0.082	1.715	1.798	0.073	0.179	0.252	650.175	0.024	0.014
S-16	Cable Installation	0.062	0.478	0.502	0.002	0.021	0.833	0.854	0.018	0.088	0.107	155.652	0.006	0.002
S-17	Paving	0.151	1.201	0.984	0.002	0.081	2.307	2.388	0.069	0.241	0.310	245.161	0.005	0.020
S-18	Site Preparation	0.023	0.153	0.357	0.001	0.010	0.767	0.777	0.008	0.080	0.088	91.527	0.003	0.005
S-19	Below-Grade Construction	0.546	4.409	4.770	0.014	0.247	7.489	7.737	0.213	0.784	0.996	1509.836	0.049	0.052
S-20	Above-Grade Construction	1.164	8.980	12.847	0.033	0.439	18.907	19.346	0.382	1.987	2.369	3473.928	0.127	0.055
S-21	Commissioning and Testing	0.059	0.358	0.540	0.002	0.030	3.354	3.384	0.024	0.349	0.373	183.027	0.005	0.012
S-22	Site & ROW Restoration (overhead)	0.063	0.581	0.649	0.002	0.026	2.229	2.255	0.019	0.360	0.380	254.541	0.006	0.016
S-23	Site & ROW Restoration (underground)	0.026	0.216	0.392	0.001	0.012	1.273	1.285	0.008	0.133	0.141	117.583	0.002	0.008

Table 44: Total Controlled Annual Emissions (tons)

Index	Name	ROG	NOX	CO	SO2	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total	CO2	CH4	N2O
S-01	Survey and Staking	0.046	0.055	0.692	0.002	0.011	1.336	1.347	0.004	0.159	0.163	191.353	0.004	0.005
S-02	Utility Locates	1.020	7.329	11.580	0.020	0.216	1.674	1.890	0.187	0.197	0.384	1756.879	0.061	0.048
S-03	Mobilization	0.050	0.462	0.652	0.001	0.015	0.188	0.203	0.013	0.022	0.035	129.703	0.004	0.005
S-04	Access Road Construction	0.221	1.918	1.780	0.007	0.081	1.225	1.306	0.068	0.298	0.366	709.619	0.023	0.024
S-05	Conventional Structure Foundation Installation	0.290	2.442	2.761	0.010	0.116	1.742	1.858	0.092	0.205	0.298	1074.551	0.031	0.052
S-06	Conventional Structure Installation	0.126	0.851	1.092	0.004	0.047	1.031	1.078	0.037	0.121	0.158	404.295	0.012	0.015
S-07	Helicopter Support	0.775	0.985	0.711	0.008	0.176	0.620	0.796	0.040	0.075	0.116	341.612	0.002	0.004
S-08	Helicopter Landing Pad Construction	0.100	0.711	1.127	0.002	0.019	0.176	0.196	0.017	0.022	0.038	161.571	0.006	0.002
S-09	Helicopter Landing Platform Construction	0.132	0.944	1.302	0.003	0.027	0.176	0.204	0.024	0.022	0.046	289.840	0.011	0.003
S-10	Helicopter Site Preparation	2.810	3.544	5.055	0.050	1.965	0.209	2.174	0.738	0.025	0.763	1789.866	0.001	0.003
S-11	Helicopter Structure Foundation Installation	0.140	1.005	1.386	0.003	0.029	0.188	0.217	0.026	0.023	0.049	308.402	0.012	0.003
S-12	Helicopter Structure Installation	0.009	0.047	0.127	0.000	0.002	0.142	0.145	0.001	0.017	0.019	30.462	0.001	0.001
S-13	Conductor Installation	0.342	1.204	0.870	0.005	0.095	0.364	0.459	0.048	0.043	0.091	347.885	0.010	0.006
S-14	Excavate Trench	0.351	2.621	3.502	0.008	0.102	0.722	0.823	0.088	0.085	0.173	770.767	0.026	0.025
S-15	Duct Bank & Conduit Installation	0.304	2.225	3.154	0.007	0.082	0.474	0.556	0.073	0.056	0.128	650.175	0.024	0.014
S-16	Cable Installation	0.062	0.478	0.502	0.002	0.021	0.237	0.258	0.018	0.029	0.047	155.652	0.006	0.002
S-17	Paving	0.151	1.201	0.984	0.002	0.081	0.634	0.715	0.069	0.074	0.143	245.161	0.005	0.020
S-18	Site Preparation	0.023	0.153	0.357	0.001	0.010	0.212	0.222	0.008	0.025	0.033	91.527	0.003	0.005
S-19	Below-Grade Construction	0.546	4.409	4.770	0.014	0.247	2.070	2.317	0.213	0.243	0.456	1509.836	0.049	0.052
S-20	Above-Grade Construction	1.164	8.980	12.847	0.033	0.439	5.263	5.702	0.382	0.625	1.007	3473.928	0.127	0.055
S-21	Commissioning and Testing	0.059	0.358	0.540	0.002	0.030	0.917	0.946	0.024	0.106	0.129	183.027	0.005	0.012
S-22	Site & ROW Restoration (overhead)	0.063	0.581	0.649	0.002	0.026	0.648	0.674	0.019	0.124	0.143	254.541	0.006	0.016
S-23	Site & ROW Restoration (underground)	0.026	0.216	0.392	0.001	0.012	0.350	0.362	0.008	0.041	0.049	117.583	0.002	0.008

Table 45: Activity Distribution by Year

Type	Count	Index	Name	Start Date	End Date	Pct 2027	Pct 2028	Pct 2029	Pct 2030	Pct 2031	Pct 2032	PCT SDAPCD
SDG&E	1	S-01	Survey and Staking	8/1/2027	2/1/2031	0.12	0.29	0.28	0.28	0.02	0.00	1.00
SDG&E	2	S-02	Utility Locates	8/1/2027	2/1/2031	0.12	0.29	0.28	0.28	0.02	0.00	1.00
SDG&E	3	S-03	Mobilization	11/1/2027	12/31/2027	1.00	0.00	0.00	0.00	0.00	0.00	1.00
SDG&E	4	S-04	Access Road Construction	1/2/2028	8/31/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	5	S-05	Conventional Structure Foundation Installation	2/2/2028	2/2/2029	0.00	0.91	0.09	0.00	0.00	0.00	1.00
SDG&E	6	S-06	Conventional Structure Installation	4/2/2028	2/2/2029	0.00	0.89	0.11	0.00	0.00	0.00	1.00
SDG&E	7	S-07	Helicopter Support	1/2/2028	10/14/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	8	S-08	Helicopter Landing Pad Construction	1/2/2028	8/31/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	9	S-09	Helicopter Landing Platform Construction	1/2/2028	8/31/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	10	S-10	Helicopter Site Preparation	1/2/2028	8/31/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	11	S-11	Helicopter Structure Foundation Installation	1/16/2028	9/30/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	12	S-12	Helicopter Structure Installation	4/1/2028	10/14/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	13	S-13	Conductor Installation	2/14/2029	5/14/2029	0.00	0.00	1.00	0.00	0.00	0.00	1.00
SDG&E	14	S-14	Excavate Trench	6/1/2029	2/1/2030	0.00	0.00	0.87	0.13	0.00	0.00	1.00
SDG&E	15	S-15	Duct Bank & Conduit Installation	7/1/2029	3/1/2030	0.00	0.00	0.75	0.25	0.00	0.00	1.00
SDG&E	16	S-16	Cable Installation	3/2/2030	11/30/2030	0.00	0.00	0.00	1.00	0.00	0.00	1.00
SDG&E	17	S-17	Paving	4/2/2031	12/1/2031	0.00	0.00	0.00	0.00	1.00	0.00	1.00
SDG&E	18	S-18	Site Preparation	6/1/2028	9/1/2028	0.00	1.00	0.00	0.00	0.00	0.00	1.00
SDG&E	19	S-19	Below-Grade Construction	9/2/2028	8/31/2029	0.00	0.33	0.67	0.00	0.00	0.00	1.00
SDG&E	20	S-20	Above-Grade Construction	9/1/2029	8/31/2032	0.00	0.00	0.11	0.33	0.33	0.22	1.00
SDG&E	21	S-21	Commissioning and Testing	1/2/2032	10/31/2032	0.00	0.00	0.00	0.00	0.00	1.00	1.00
SDG&E	22	S-22	Site & ROW Restoration (overhead)	6/1/2029	10/31/2029	0.00	0.00	1.00	0.00	0.00	0.00	1.00
SDG&E	23	S-23	Site & ROW Restoration (underground)	12/1/2030	3/30/2031	0.00	0.00	0.00	0.26	0.74	0.00	1.00

Table 46: Annual Emissions - SDAPCD (tons/year)

District	Type	Year	ROG	NOX	CO	SO2	PM10 Exhaust	PM10 Dust	PM10 Total	PM2.5 Exhaust	PM2.5 Dust	PM2.5 Total	CO2	CH4	N2O	CO2e	CO2e (MT)
SDAPCD	Unctrl	2027	0.2	1.3	2.1	0.0	0.0	2.0	2.0	0.0	0.2	0.2	362.396	0.012	0.012	366.130	332.147
SDAPCD	Unctrl	2028	5.1	15.9	20.4	0.1	2.6	24.8	27.4	1.2	3.0	4.2	6120.199	0.134	0.137	6164.488	5592.331
SDAPCD	Unctrl	2029	1.8	12.1	15.4	0.0	0.6	18.3	18.8	0.5	2.0	2.5	3853.059	0.127	0.116	3890.724	3529.607
SDAPCD	Unctrl	2030	0.9	6.5	9.6	0.0	0.3	11.3	11.6	0.2	1.2	1.4	2158.205	0.077	0.044	2173.252	1971.541
SDAPCD	Unctrl	2031	0.6	4.5	5.9	0.0	0.2	9.8	10.1	0.2	1.0	1.2	1537.955	0.051	0.045	1552.782	1408.660
SDAPCD	Unctrl	2032	0.3	2.4	3.4	0.0	0.1	7.6	7.7	0.1	0.8	0.9	956.419	0.033	0.024	964.335	874.830
SDAPCD	Ctrl	2027	0.2	1.3	2.1	0.0	0.0	0.5	0.6	0.0	0.1	0.1	362.396	0.012	0.012	366.130	332.147
SDAPCD	Ctrl	2028	5.1	15.9	20.4	0.1	2.6	7.0	9.6	1.2	1.0	2.1	6120.199	0.134	0.137	6164.488	5592.331
SDAPCD	Ctrl	2029	1.8	12.1	15.4	0.0	0.6	5.1	5.7	0.5	0.6	1.1	3853.059	0.127	0.116	3890.724	3529.607
SDAPCD	Ctrl	2030	0.9	6.5	9.6	0.0	0.3	3.1	3.4	0.2	0.4	0.6	2158.205	0.077	0.044	2173.252	1971.541
SDAPCD	Ctrl	2031	0.6	4.5	5.9	0.0	0.2	2.7	3.0	0.2	0.3	0.5	1537.955	0.051	0.045	1552.782	1408.660
SDAPCD	Ctrl	2032	0.3	2.4	3.4	0.0	0.1	2.1	2.2	0.1	0.2	0.4	956.419	0.033	0.024	964.335	874.830

Table 47: Annual GHG Emissions - SDAPCD (metric tons/year)

Phase	CO2	CH4	N2O	SF6	CO2e
Construction	9376.347	0.247	0.240	0.000	9454.08
O&M	0.022	0.000	0.000	0.000	0.02
Electricity	29.655	0.006	0.001	0.000	30.01
SF6 Loss	0.000	0.000	0.000	0.001	26.99
O&M Total	29.676	0.006	0.001	0.001	57.02

Table 48: Equipment List and Trip Requirements

Equip Index	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Days Used	Hours Per Day	On-Off	On Type	On Distance per Trip (miles)	Trips Per Day	Daily VMT	Total VMT	Total Trips per day	Total Trips	Vehicle Type
1	S-01	Survey and Staking	Pickup - 1/2 Ton	395	Gasoline	2	1052	8	on	passenger	25	2	100	105,200	4	4,208	Worker
4	S-02	Utility Locates	Flatbed truck	350	Diesel	2	1052	10	on	hhdt	20	2	80	84,160	4	4,208	Truck
5	S-02	Utility Locates	Pickup - 1 Ton	410	Diesel	2	1052	10	on	passenger	25	2	100	105,200	4	4,208	Worker
8	S-03	Mobilization	Flatbed truck	350	Diesel	1	47	10	on	hhdt	20	2	40	1,880	2	94	Truck
10	S-03	Mobilization	Gang truck	350	Diesel	2	47	8	on	passenger	25	2	100	4,700	4	188	Truck
13	S-03	Mobilization	Pickup - 1 Ton	410	Diesel	4	47	2	on	passenger	25	2	200	9,400	8	376	Worker
14	S-03	Mobilization	Flatbed Truck	350	Diesel	2	47	3	on	hhdt	20	2	80	3,760	4	188	Truck
16	S-03	Mobilization	Water truck	300	Diesel	2	47	10	on	hhdt	25	2	100	4,700	4	188	Truck
17	S-04	Access Road Construction	Pickup - 1/2 ton	395	Gasoline	2	203	2	on	passenger	25	2	100	20,300	4	812	Worker
18	S-04	Access Road Construction	Pickup - 1 ton	410	Diesel	4	203	2	on	passenger	25	2	200	40,600	8	1,624	Worker
20	S-04	Access Road Construction	Dump Truck	415	Diesel	3	203	10	on	hhdt	25	2	150	30,450	6	1,218	Truck
22	S-04	Access Road Construction	Water Truck	300	Diesel	2	203	6	on	hhdt	25	2	100	20,300	4	812	Truck
33	S-05	Conventional Structure Foundation Installation	Concrete Truck	425	Diesel	4	303	5	on	hhdt	20	2	160	48,480	8	2,424	Truck
34	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	410	Diesel	4	303	2	on	passenger	25	2	200	60,600	8	2,424	Worker
35	S-05	Conventional Structure Foundation Installation	Water Truck	300	Diesel	2	303	6	on	hhdt	25	2	100	30,300	4	1,212	Truck
36	S-05	Conventional Structure Foundation Installation	Dump Truck	415	Diesel	3	303	10	on	hhdt	25	2	150	45,450	6	1,818	Truck
43	S-06	Conventional Structure Installation	Pickup - 1/2 ton	395	Gasoline	4	252	2	on	passenger	25	2	200	50,400	8	2,016	Worker
45	S-06	Conventional Structure Installation	Pickup - 1 ton	410	Diesel	4	252	2	on	passenger	25	2	200	50,400	8	2,016	Worker
48	S-06	Conventional Structure Installation	Water Truck	300	Diesel	2	252	6	on	hhdt	25	2	100	25,200	4	1,008	Truck
50	S-10	Helicopter Site Preparation	Jet Fuel Truck	300	Diesel	1	203	4	on	vendor	20	2	40	8,120	2	406	Truck
56	S-07	Helicopter Support	Jet Fuel Truck	300	Diesel	1	239	4	on	vendor	20	2	40	9,560	2	478	Truck
83	S-13	Conductor Installation	Jet Fuel Truck	300	Diesel	0	76	10	on	vendor	20	2	-	-	0	-	Truck
85	S-13	Conductor Installation	Pickup - 1/2 ton	395	Gasoline	4	76	2	on	passenger	25	2	200	15,200	8	608	Worker
86	S-13	Conductor Installation	Pickup - 1 Ton	410	Diesel	4	76	2	on	passenger	25	2	200	15,200	8	608	Worker
89	S-13	Conductor Installation	Water Truck	300	Diesel	2	76	6	on	hhdt	25	2	100	7,600	4	304	Truck
98	S-14	Excavate Trench	Flatbed truck	350	Diesel	1	201	10	on	hhdt	20	2	40	8,040	2	402	Truck
100	S-14	Excavate Trench	Foreman Truck	300	Diesel	3	201	8	on	passenger	20	2	120	24,120	6	1,206	Worker
101	S-14	Excavate Trench	Pickup - 1 Ton	410	Diesel	4	201	2	on	passenger	25	2	200	40,200	8	1,608	Worker
104	S-14	Excavate Trench	Dump Truck	415	Diesel	3	201	8	on	hhdt	25	2	150	30,150	6	1,206	Truck
105	S-14	Excavate Trench	Water truck	300	Diesel	1	201	6	on	hhdt	25	2	50	10,050	2	402	Truck
110	S-15	Duct Bank & Conduit Installation	Flatbed truck	350	Diesel	1	199	10	on	hhdt	20	2	40	7,960	2	398	Truck
112	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	410	Diesel	4	199	2	on	passenger	25	2	200	39,800	8	1,592	Worker
115	S-15	Duct Bank & Conduit Installation	Water truck	300	Diesel	1	199	6	on	hhdt	25	2	50	9,950	2	398	Truck
119	S-17	Paving	Concrete Truck	425	Diesel	5	201	2	on	hhdt	20	2	200	40,200	10	2,010	Truck
125	S-17	Paving	Flatbed truck	350	Diesel	1	201	10	on	hhdt	20	2	40	8,040	2	402	Truck
126	S-17	Paving	Pickup - 1 Ton	410	Diesel	4	201	2	on	passenger	25	2	200	40,200	8	1,608	Worker
129	S-18	Site Preparation	Flatbed truck	350	Diesel	0	78	10	on	hhdt	20	2	-	-	0	-	Truck
132	S-18	Site Preparation	Pickup - 1 Ton	410	Diesel	4	78	2	on	passenger	25	2	200	15,600	8	624	Worker
133	S-18	Site Preparation	Flatbed Truck	350	Diesel	2	78	3	on	hhdt	20	2	80	6,240	4	312	Truck
134	S-18	Site Preparation	Water truck	300	Diesel	1	78	6	on	hhdt	25	2	50	3,900	2	156	Truck
135	S-19	Below-Grade Construction	Water Truck	300	Diesel	1	300	6	on	hhdt	25	2	50	15,000	2	600	Truck
139	S-19	Below-Grade Construction	Pickup - 1/2 Ton	395	Gasoline	4	300	2	on	passenger	25	2	200	60,000	8	2,400	Worker
140	S-19	Below-Grade Construction	Pickup - 1 Ton	410	Diesel	4	300	2	on	passenger	25	2	200	60,000	8	2,400	Worker
143	S-19	Below-Grade Construction	Concrete Truck	425	Diesel	4	300	5	on	hhdt	20	2	160	48,000	8	2,400	Truck
146	S-19	Below-Grade Construction	Dump Truck	415	Diesel	3	300	10	on	hhdt	25	2	150	45,000	6	1,800	Truck
147	S-19	Below-Grade Construction	Tool - Van/Conex 20'	0	Diesel	1	300	3	on	passenger	25	2	50	15,000	2	600	Truck
154	S-20	Above-Grade Construction	Pickup - 1/2 Ton	395	Gasoline	4	903	2	on	passenger	25	2	200	180,600	8	7,224	Worker
155	S-20	Above-Grade Construction	Pickup - 1 Ton	410	Diesel	4	903	2	on	passenger	25	2	200	180,600	8	7,224	Worker
156	S-20	Above-Grade Construction	Welding Truck	250	Diesel	2	903	2	on	passenger	25	2	100	90,300	4	3,612	Truck
164	S-21	Commissioning and Testing	Pickup - 1/2 Ton	395	Gasoline	4	253	2	on	passenger	25	2	200	50,600	8	2,024	Worker
165	S-21	Commissioning and Testing	Pickup - 1 Ton	410	Diesel	4	253	2	on	passenger	25	2	200	50,600	8	2,024	Worker
167	S-21	Commissioning and Testing	Water Truck	300	Diesel	1	253	6	on	hhdt	25	2	50	12,650	2	506	Truck
168	S-21	Commissioning and Testing	Tool - Van/Conex 20'	0	Diesel	3	253	3	on	passenger	25	2	150	37,950	6	1,518	Truck
169	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	395	Gasoline	4	127	2	on	passenger	25	2	200	25,400	8	1,016	Worker
170	S-22	Site & ROW Restoration (overhead)	Dump Truck	415	Diesel	2	127	10	on	hhdt	25	2	100	12,700	4	508	Truck
172	S-22	Site & ROW Restoration (overhead)	Water Truck	300	Diesel	2	127	6	on	hhdt	25	2	100	12,700	4	508	Truck
177	S-22	Site & ROW Restoration (overhead)	Haul Truck	425	Diesel	1	127	10	on	hhdt	25	2	50	6,350	2	254	Truck
180	S-22	Site & ROW Restoration (overhead)	Water Truck	300	Diesel	1	127	6	on	hhdt	25	2	50	6,350	2	254	Truck

Equip Index	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Days Used	Hours Per Day	On-Off	On Type	On Distance per Trip (miles)	Trips Per Day	Daily VMT	Total VMT	Total Trips per day	Total Trips	Vehicle Type
181	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	425	Diesel	1	127	6	on	vendor	25	2	50	6,350	2	254	Truck
182	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	410	Diesel	1	127	3	on	passenger	25	2	50	6,350	2	254	Worker
183	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	395	Gasoline	4	98	2	on	passenger	25	2	200	19,600	8	784	Worker
184	S-23	Site & ROW Restoration (underground)	Dump Truck	415	Diesel	0	98	0	on	hhdt	25	2	-	-	0	-	Truck
186	S-23	Site & ROW Restoration (underground)	Water Truck	300	Diesel	2	98	6	on	hhdt	25	2	100	9,800	4	392	Truck
191	S-23	Site & ROW Restoration (underground)	Haul Truck	425	Diesel	1	98	10	on	hhdt	25	2	50	4,900	2	196	Truck
194	S-23	Site & ROW Restoration (underground)	Water Truck	300	Diesel	1	98	6	on	hhdt	25	2	50	4,900	2	196	Truck
195	S-23	Site & ROW Restoration (underground)	Hydroseed truck	425	Diesel	1	98	6	on	vendor	25	2	50	4,900	2	196	Truck
196	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	410	Diesel	1	98	3	on	passenger	25	2	50	4,900	2	196	Worker
197	S-01	Survey and Staking	Worker Commute	NA	Gasoline	5	1052	NA	on	passenger	40	2	400	420,800	10	10,520	Worker
198	S-02	Utility Locates	Worker Commute	NA	Gasoline	5	1052	NA	on	passenger	40	2	400	420,800	10	10,520	Worker
199	S-03	Mobilization	Worker Commute	NA	Gasoline	11	47	NA	on	passenger	40	2	880	41,360	22	1,034	Worker
200	S-04	Access Road Construction	Worker Commute	NA	Gasoline	11	203	NA	on	passenger	40	2	880	178,640	22	4,466	Worker
201	S-05	Conventional Structure Foundation Installation	Worker Commute	NA	Gasoline	19	303	NA	on	passenger	40	2	1,520	460,560	38	11,514	Worker
202	S-06	Conventional Structure Installation	Worker Commute	NA	Gasoline	12	252	NA	on	passenger	40	2	960	241,920	24	6,048	Worker
203	S-07	Helicopter Support	Worker Commute	NA	Gasoline	14	239	NA	on	passenger	40	2	1,120	267,680	28	6,692	Worker
204	S-08	Helicopter Landing Pad Construction	Worker Commute	NA	Gasoline	5	203	NA	on	passenger	40	2	400	81,200	10	2,030	Worker
205	S-09	Helicopter Landing Platform Construction	Worker Commute	NA	Gasoline	5	203	NA	on	passenger	40	2	400	81,200	10	2,030	Worker
206	S-10	Helicopter Site Preparation	Worker Commute	NA	Gasoline	5	203	NA	on	passenger	40	2	400	81,200	10	2,030	Worker
207	S-11	Helicopter Structure Foundation Installation	Worker Commute	NA	Gasoline	5	216	NA	on	passenger	40	2	400	86,400	10	2,160	Worker
208	S-12	Helicopter Structure Installation	Worker Commute	NA	Gasoline	5	164	NA	on	passenger	40	2	400	65,600	10	1,640	Worker
209	S-13	Conductor Installation	Worker Commute	NA	Gasoline	16	76	NA	on	passenger	40	2	1,280	97,280	32	2,432	Worker
210	S-14	Excavate Trench	Worker Commute	NA	Gasoline	9	201	NA	on	passenger	40	2	720	144,720	18	3,618	Worker
211	S-15	Duct Bank & Conduit Installation	Worker Commute	NA	Gasoline	7	199	NA	on	passenger	40	2	560	111,440	14	2,786	Worker
212	S-16	Cable Installation	Worker Commute	NA	Gasoline	6	227	NA	on	passenger	40	2	480	108,960	12	2,724	Worker
213	S-17	Paving	Worker Commute	NA	Gasoline	8	201	NA	on	passenger	40	2	640	128,640	16	3,216	Worker
214	S-18	Site Preparation	Worker Commute	NA	Gasoline	8	78	NA	on	passenger	40	2	640	49,920	16	1,248	Worker
215	S-19	Below-Grade Construction	Worker Commute	NA	Gasoline	21	300	NA	on	passenger	40	2	1,680	504,000	42	12,600	Worker
216	S-20	Above-Grade Construction	Worker Commute	NA	Gasoline	22	903	NA	on	passenger	40	2	1,760	1,589,280	44	39,732	Worker
217	S-21	Commissioning and Testing	Worker Commute	NA	Gasoline	7	253	NA	on	passenger	40	2	560	141,680	14	3,542	Worker
218	S-22	Site & ROW Restoration (overhead)	Worker Commute	NA	Gasoline	10	127	NA	on	passenger	40	2	800	101,600	20	2,540	Worker
219	S-23	Site & ROW Restoration (underground)	Worker Commute	NA	Gasoline	9	98	NA	on	passenger	40	2	720	70,560	18	1,764	Worker

3.5 BIOLOGICAL RESOURCES

This section describes the biological resources in the vicinity of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project). SDG&E prepared technical reports to inform and support the analysis in this chapter. These technical reports included desktop review and field survey components. The following technical reports were reviewed, discussed, and summarized in the sections that follow:

- Biological Resources Technical Report (Insignia Environmental [Insignia] 2026a), which is provided in Attachment 3.5-J: Biological Resources Technical Report;
- Aquatic Resources Delineation Report (Insignia 2026b), which is provided in Attachment 3.11-A: Aquatic Resources Delineation Report in Section 3.11 Hydrology and Water Quality; and
- Botanical Resources Report (Insignia 2026c), which is provided in Attachment 3.5-K: Botanical Resources Survey Report.

3.5.1 Methods

For the purposes of this analysis, the survey area includes a 150-foot buffer from the Proposed Project alignment resulting in an approximately 300 foot-wide-corridor plus a 150-foot buffer from the existing Suncrest Substation, proposed fly yards,[1] and proposed staging yards. The Proposed Project alignment consists of three segments; the proposed 230 kV overhead (OH) Segment, the proposed 230 kV eastern underground (UG) segment, and the proposed 230 kV western UG segment. The Proposed Project Area includes the Proposed Project alignment, the existing Suncrest Substation, proposed fly yards, and proposed staging yards, which are all within the larger survey area. The survey area encompasses areas of permanent and temporary impacts associated with the construction of the Proposed Project. However, impacts to some biological resources (e.g., special-status birds) may occur at greater distances and are not limited to the survey area. In these instances, a larger area is considered for the evaluation and impact analysis of these biological resources.

3.5.2 Environmental Setting

This section describes the vegetation communities and land cover types present within the survey area, as well as the sensitive biological resources (i.e., special-status plant and wildlife species) with a potential for occurrence within the survey area.

3.5.2.1 Vegetation Communities

A total of 17 vegetation communities and land cover types were identified in the survey area, as depicted in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area and detailed in Table 3.5-1: Vegetation Communities and Land Covers within the Survey Area. Multiple vegetation communities observed are considered sensitive as described in Section 3.5.2.3 Natural Vegetation Communities. The following subsections describe each vegetation community identified within the survey area.

[1] A fly yard is an area that is used for temporary helicopter takeoff, landing, and refueling, if necessary.

Table 3.5-1: Vegetation Communities and Land Covers within the Survey Area

Vegetation Community or Land Cover	Approximate Size within the Survey Area (acres)
Riparian	
Coast Live Oak Riparian Forest	7.97
Non-Vegetated	4.59
Riparian Forest	2.69
Riparian Woodland	5.06
Uplands	
Agriculture	1.74
Buckwheat Scrub	5.65
Chaparral	168.48
Coastal Sage Scrub	225.18
Coastal Sage Scrub/Chaparral Mix	43.35
Landscaped/Ornamental	29.46
Non-Native Grassland	14.64
Open Engelmann Oak Woodland	1.10
Open Oak Woodland	1.70
Other Cover Types	
Developed	74.30
Disturbed	41.99
Bare Ground	26.41
Concrete-Lined Channel	<0.01
Total	**654.33**

Note: The summed values may not be equal to the total due to rounding.

3.5.2.1.1 Riparian and Wetland Vegetation Communities

Coast Live Oak Riparian Forest

Coast live oak riparian forest typically features a dense stand of trees dominated by evergreen sclerophyllous trees (e.g., coast live oak) with a closed or nearly closed canopy. This vegetation community appears to be richer in herbs and poorer in understory shrubs than other riparian communities. This vegetation cover type has a homogenous mixture of open oak woodland and riparian woodland, especially if the riparian elements are not substantial or are discontinuous. This vegetation community is often found in bottomlands and outer floodplains along larger streams on fine-grained, rich alluvium. Characteristic species include the following:

- California mugwort (*Artemisia douglasiana*),
- California toothwort (*Cardamine californica*),
- common eucrypta (Eucrypta chrysanthemifolia),
- toyon,
- heartleaf keckiella (*Keckiella cordifolla*),
- pink honeysuckle (*Lonicera hispidula*),
- wild cucumber (*Marah macrocarpa*),
- fiesta flower (*Pholistoma auritum*),
- coast live oak,
- skunkbush,
- California wild rose (*Rosa californica*),
- Pacific blackberry (*Rubus ursinus*),
- blue elderberry,
- creeping snowberry (*Symphoricarpos mollis*), and
- poison oak (Oberbauer et al. 2008).

Within the survey area, this vegetation community is found along streams and creeks where coast live oak is dominant in the canopy, but western sycamore (*Platanus racemosa*) or Goodding's black willow (*Salix gooddingii*) may be present at low densities. Within the understory, poison oak is dominant.

Overall, habitat quality is moderate to high within this vegetation community. While some low-quality habitat exists in the western portion of the survey area, the highest-quality habitat is located within Sweetwater Authority- and Cleveland National Forest- (CNF-) managed lands. Anthropogenic impacts are limited in these areas due to the remote location and limited public access.

Non-Vegetated

Non-vegetated habitat consists of the sandy, gravelly, or rocky fringe of waterways or flood channels. These non-vegetated areas are unvegetated on a relatively permanent basis. Variable water lines inhibit the growth of vegetation, although some weedy species of grasses may grow along the outer edges of the wash. Vegetation may exist here but is usually less than 10 percent of the total cover.

Within the survey area, this habitat is limited to the banks of the Sweetwater River where fluctuating water levels have prevented the growth of vegetation, resulting in barren areas between the existing upland and riparian habitats.

Riparian Forest

Riparian forest is a dense stand of riparian trees (e.g., western sycamore and Fremont cottonwood [*Populus fremontii*]) that cannot be differentiated to a more specific vegetation community, such as coast live oak riparian forest. This vegetation community is found along streams and rivers (Oberbauer et al. 2008).

Within the survey area, riparian forest is found where Taylor Creek meets Loveland Reservoir. Within this area, Goodding's black willow is dominant with mulefat (*Baccharis salicifolia*) and blue elderberry present in the understory at low densities.

Overall, habitat quality is moderate to high within this vegetation community. While some low-quality habitat exists in the western portion of the survey area, the highest-quality habitat is located within Sweetwater Authority- and CNF-managed lands. Anthropogenic impacts are limited in these areas due to the remote location and limited public access.

Riparian Woodland

Riparian woodland is a moderate-density riparian woodland dominated by small trees or shrubs, with scattered taller riparian trees. These stands seldom form closed canopy forests and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species. This vegetation community is often found in rocky streambeds subject to seasonally high-intensity flooding where flood scour occurs. Characteristic species include willows (*Salix* spp.), California mugwort, California spikenard (*Aralia californica*), scouringrush horsetail (*Equisetum hyemale*), smilo grass (*Stipa miliacea*), coast live oak, Pacific blackberry, blue elderberry, poison oak, California laurel (*Umbellularia californica*), mulefat, cottonwoods, and stinging nettle (*Urtica dioica*) (Oberbauer et al. 2008).

Within the survey area, riparian woodlands are found along streams and creeks that tend to flow more intermittently or are located within narrow canyons or rocky areas. The total cover by the tree canopy is substantially lower than what would be found within riparian forest. Western sycamore and Goodding's black willow are the dominant tree species. Poison oak, blue elderberry, mulefat, and skunkbush are dominant in the understory.

Overall, habitat quality is moderate to high within this vegetation community. While some low-quality habitat exists in the western portion of the survey area, the highest-quality habitat is located within Sweetwater Authority- and CNF-managed lands. Anthropogenic impacts are limited in these areas due to the remote location and limited public access.

3.5.2.1.2 Upland Vegetation Communities

Agricultural

Agricultural habitat refers to lands that are currently disturbed by cultivation or other agricultural activities involving crop production practices and/or improvement of livestock grazing (e.g., field crops, improved pastures). Pastures fall into the agricultural heading if cultivation practices

(e.g., discing, mowing, seeding, and irrigation or supplemental feeding and/or watering) are used periodically to improve land for livestock forage and result in a general absence of fossorial species[2] availability for raptors and other predators. Agricultural habitat also includes agricultural practices that use relatively high amounts of labor and resources on relatively small areas of land, which tend to have significant permanent buildings and installations. Examples may include dairies, nurseries, cattle feedlots, and other confined animal feeding operations. Intentional plantings of trees, shrubs, or vines maintained for food production or commercial use, including orchards and vineyards, are also considered agricultural habitat. These plantings tend to be perennial, can be artificially irrigated and fertilized, and usually do not involve intense annual soil disturbance. Lands that are not currently in production but that are identified as agriculture and have been cultivated in three of the last 5 years or according to accepted cultural practices will be considered fallow agriculture, regardless of species composition. Conversely, agricultural lands that have not been cultivated in three of the last 5 years, or that are proposed for conversion to non-agricultural land uses (e.g., residential, commercial, industrial), will be mapped according to the actual vegetation type (e.g., non-native grassland) based on vegetative characteristics and without regard to current or historic land uses.

Within the survey area, this vegetation community is limited to a small area along the proposed western underground alignment where a series of horse stables are located along La Cresta Road near the unincorporated community of Crest. This agricultural habitat consists of large trees (e.g., eucalyptus [*Eucalyptus* spp.,]) that have been intentionally planted amongst the stables.

Buckwheat Scrub

Buckwheat scrub is a nearly homogenous community usually resulting from disturbance and transitioning to coastal sage scrub or chaparral. This community is often in disturbed areas in the coastal and foothill areas of San Diego County and often intergrades with coastal sage scrub (Oberbauer et al. 2008).

Within the survey area, this vegetation community is dominated by California buckwheat (*Eriogonum fasciculatum*), sometimes with sparsely scattered deerweed (*Acmispon glaber*), and is found within rock outcrops in the eastern portion of the survey area and within transitional zones between vegetation communities throughout the survey area.

Overall, habitat quality is moderate to high within this vegetation community as the small patches that do exist are generally not accessible by the public and are surrounded by other intact, high-quality habitats.

Chaparral

Chaparral is a broadly defined vegetation community that is composed of tall (i.e., 3 to 13 feet high) shrubs that are densely interwoven and sometimes impenetrable, with little herbaceous understory. The herbaceous cover would increase following a fire, but as shrubs respond by stump-sprouting, the herbaceous cover would decrease over time. Chaparral includes stands that are dominated by chamise (*Adenostoma fasciculatum*), California scrub oak (*Quercus berberidifolia*), or a mixture of broad-leaved sclerophyll shrubs (often *Ceanothus* spp.). Coastal

[2] A species adapted to living underground, often by digging a burrows.

sage scrub species may occur in patches or as a mosaic within chaparral, but typical coastal sage scrub species are not dominant. Considerable leaf litter may be found in stands where broad-leaved sclerophyll shrubs are more abundant. This vegetation community is often found on dry, rocky, steep slopes with little soil and moderate temperatures. Slopes where this vegetation community is found are typically north-facing (Oberbauer et al. 2008).

Characteristic species include chamise, big berry manzanita (*Arctostaphylos glauca*), buckbrush (*Ceanothus cuneatus*), mountain mahogany (*Cercocarpus betuloides*), bush poppy (*Dendromecon rigida*), California buckwheat, California yerba santa (*Eriodictyon califomicum*), deerweed, hollyleaf cherry (*Prunus ilicifolia*), coastal sage scrub oak (*Quercus dumosa*), sugar bush (*Rhus ovata*), laurel sumac (*Malosma laurina*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), ashy spike moss (*Selaginella cinerascens*), Mojave yucca (*Yucca schidigera*), chaparral yucca (*Hesperoyucca whipplei*), Eastwood manzanita (*Arctostaphylos glandulosa*), white fairy-lantern (*Calochortus albus*), woolly leaf ceanothus (*Ceanothus tomentosus*), smooth mountain mahogany (*Cercocarpus minutiflorus*), toyon (*Heteromeles arbutifolia*), southern honeysuckle (*Lonicera subspicata*), spiny redberry (*Rhamnus crocea*), white flowering currant (*Ribes indecorum*), mission manzanita (*Xylcoccus bicolor*), desert ceanothus (*Ceanothus pauciflorus*), chaparral whitethorn (*Ceanothus leucodermis*), California ash (*Fraxinus dipetala*), California flannelbush (*Fremontodendron californicum*), Montana chaparral pea (*Pickeringia montana*), interior live oak (*Quercus wislizenii*), skunkbush (*Rhus trilobata*), and poison oak (*Toxicodendron diversilobum*) (Oberbauer et al. 2008).

Within the survey area, this vegetation community is typically dominated by chamise, woolly leaf ceanothus, or mission manzanita. As elevation increases, this vegetation community becomes more prevalent in the eastern portion of the survey area. This vegetation community is also more prevalent on north-facing slopes or around drainages that are sheltered from high temperatures, thereby retaining more moisture. Mountain mahogany and scrub oak form dense and nearly impenetrable thickets along some ephemeral drainages within the survey area. Near the existing Suncrest Substation in the easternmost portion of the survey area, mission manzanita is no longer present and has been replaced by big berry manzanita. Other species commonly observed within the survey area in this vegetation community include flannel bush, poison oak, sugar bush, Mojave yucca, chaparral yucca, chaparral whitethorn, chaparral beardtongue (*Keckiella antirrhinoides*), and cup-leaved ceanothus (*Ceanothus perplexans*).

Overall, habitat quality is moderate to high within this vegetation community. A majority of this vegetation community is located within Sweetwater Authority- and CNF- managed lands where there is limited public access due to a lack of roads and less urban development.

Coastal Sage/Chaparral Mix

Coastal sage/chaparral mix is composed of a mix of sclerophyllous, woody chaparral species, and drought-deciduous, malacophyllous coastal sage scrub species. Chamise and California sagebrush (*Artemisia californica*) are dominant and equal in cover. Generally, laurel sumac, *Salvia* spp., and lemonade berry (*Rhus integrifolia)* are more common in coastal sage scrub, while *Ceanothus* spp. and mission manzanita are more common in chaparral (Oberbauer et al. 2008). In some areas, this is a post-fire successional community. This vegetation cover type is a catch-all that is intermediate between coastal sage scrub and chaparral. Characteristic species include chamise, California sagebrush, *Ceanothus* spp., black sage, and poison oak.

Within the survey area, this vegetation community is typically co-dominated by both chamise and California sagebrush and can be found throughout in sites where coastal sage scrub and chaparral are transitioning, likely due to factors including aspect and elevation. Species typical of coastal sage scrub and chaparral are co-dominant (i.e., approximately 50 percent cover) in this vegetation community. Other species commonly observed within the survey area in this vegetation community include California buckwheat, chaparral beardtongue, deerweed, laurel sumac, mission manzanita, Mojave yucca, scrub oak, and sugar bush.

Overall, habitat quality is moderate to high within this vegetation community. In the western portion of the survey area, this habitat is more fragmented with some low-quality patches of habitat. However, farther to the east (particularly within Sweetwater Authority- and CNF-managed lands), habitat quality is moderate to high due to the lack of public access, minimal road networks, and less urban development.

Coastal Sage Scrub

Coastal sage scrub is composed of low (i.e., up to 3 feet high), soft-woody subshrubs that are most active in winter and early spring. Many taxa found in this vegetation community are facultatively drought-deciduous. This vegetation cover is dominated by California sagebrush and California buckwheat together with laurel sumac, white sage, and black sage. Stem- and leaf-succulents, while present, are not nearly as conspicuous as in the maritime succulent scrub vegetation community. Typically, this vegetation community is found on low moisture availability sites, including steep, xeric slopes or clay-rich soils that are slow to release stored water. This vegetation community also intergrades at higher elevations with chaparral (Oberbauer et al. 2008).

Within the survey area, this vegetation community is typically dominated by California sagebrush and California buckwheat. Munz's sage (*Salvia munzii*), desertbroom baccharis (*Baccharis sarothroides*), deerweed, laurel sumac, San Diego County viguiera (*Bahiopsis laciniata*), and white sage are also present and at times are the dominant species within stands of this vegetation community. As elevation increases, this vegetation community transitions to chaparral in the eastern portion of the survey area. This vegetation community is also more prevalent on south-facing slopes or within areas that have been previously disturbed.

Overall, habitat quality is moderate to high within this vegetation community. In the western portion of the survey area, this habitat is more fragmented with some low-quality patches of habitat. However, farther to the east, particularly within Sweetwater Authority- and CNF-managed lands, habitat quality is moderate to high due to the lack of public access, minimal road networks, and less urban development.

Landscaped/Ornamental

Landscaped/ornamental habitat includes intentionally planted areas generally associated with aesthetic improvements and urban development. Landscaped/ornamental areas may include lawns, public parks, golf courses, aesthetic plantings associated with sidewalks, medians, residential or commercial developments or other city improvements (e.g., street trees), and golf courses (SDG&E 2023).

Within the survey area, this habitat is primarily found around residential homes near the unincorporated community of Crest.

Non-Native Grassland

Non-native grassland is characterized by a mixture of annual grasses and broad-leaved, herbaceous species. Non-native grass species must be composed of more than 50 percent of a species present to constitute non-native grassland. Annual species comprise 50 to more than 90 percent of the vegetative cover, and most annuals are non-native species. Non-native grasses typically comprise at least 30 percent of the vegetation, although this number can be much higher in some years and lower in others depending on land use and climatic conditions. The presence of broad-leaved species (e.g., mustard) following winters of abnormally higher rainfall would still be classified as non-native grassland if these species make up less than 50 percent cover. Shrubs and trees may also be present, but represent a minority (less than 15 percent) of the vegetative and canopy cover. Non-native grassland indicator species include brome grasses, wild oats, fescues (*Vulpia* spp.), and filarees. Non-native grassland typically supports habitat for small mammals, reptiles, and raptor foraging. Unimproved or natural grazing lands not subject to cultivation practices may still be classified as non-native grassland (SDG&E 2023).

Species commonly observed within the survey area in this vegetation community include brome grasses, filarees, short podded mustard, and wild oats. Within the survey area, this vegetation community is limited to a small area northeast of Loveland Reservoir, and within and adjacent to the proposed Lyons Valley Staging/Fly Yard and the proposed Swat Staging Yard. Overall, habitat quality is moderate to high within this vegetation community because it is surrounded by other moderate- to high-quality habitats.

Open Engelmann Oak Woodland

Open Engelmann oak woodland is an evergreen woodland dominated by Engelmann oak (*Quercus engelmannii*) with an understory of grassland species, coastal sage scrub, valley grassland, chaparral, or combined with coast live oak (*Quercus agrifolia*) at mesic sites. This vegetation community is found on relatively moist sites on fine-textured soils of gentle slopes and valley bottoms. This vegetation community intergrades with coastal sage scrubs on drier, rockier sites, and with dense Engelmann oak woodland on more mesic sites (Oberbauer et al. 2008).

Within the survey area, this vegetation community is limited to small patches in the eastern portion of the survey area where scattered Engelmann oaks are found along a drainage and to the east of the existing Suncrest Substation. Coastal sage scrub is typically found within the understory of this vegetation community in the survey area. Species commonly observed within the survey area in this vegetation community include big berry manzanita, California buckwheat, California sagebrush, chamise, Engelmann oak, spiny redberry, and Eastwood manzanita.

Overall, habitat quality is moderate to high within this vegetation community because it is connected to other moderate- to high-quality habitats and has been insulated from anthropogenic impacts due to the remote location within CNF-managed lands. However, there are edge effects within the patches of this habitat that are located adjacent to the existing Suncrest Substation.

Open Oak Woodland

Open oak woodland is dominated by coast live oak. The shrub layer is poorly developed, but may include toyon, currant (*Ribes* spp.), laurel sumac, or blue elderberry (*Sambucus mexicana*). The herb component is continuous and dominated by bromes and several other introduced taxa. Typically, this habitat occurs on north-facing slopes or shaded ravines in the south, and more exposed sites in the north. This vegetation community intergrades with coastal sage scrub on drier sites and with coast live oak forest or mixed oak/coniferous forest on moister sites.

Within the survey area, this habitat is limited to small patches near the existing Suncrest Substation, and along La Cresta Road and Al Bahr Drive. Near the existing Suncrest Substation, coast live oak is dominant in the overstory, and chaparral whitethorn is dominant in the shrub layer of this vegetation community. Along La Cresta Road and Al Bahr Drive, coast live oak is dominant and the shrub layer is less consistent with non-native grasses dominating the understory. Other species commonly observed within the survey area in this vegetation community include big berry manzanita, brome grasses, Eastwood's manzanita, Johnston's honeysuckle, and wild oats.

Overall habitat quality is moderate to high within this vegetation community; however, there are edge effects because this habitat within the survey area borders existing developed and disturbed areas.

3.5.2.1.3 Riparian and Wetland Vegetation Communities

3.5.2.1.4 Land Cover Types

Developed

Developed land refers to areas that have been permanently altered for human use and activities. Developed land may include paved parking lots, residential homes, commercial development and infrastructure, and paved roads (SDG&E 2023).

Within the survey area, this land cover primarily includes paved roads, residential homes, and the existing Suncrest Substation.

Disturbed Habitat

Disturbed habitat refers to any land in which the following occurs:

- vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction (i.e., grading); or

- vegetative cover is greater than 10 percent, there is soil surface disturbance and/or compaction, and/or the presence of building foundations and/or debris (i.e., irrigation piping, fencing, old wells, abandoned farming or mining equipment).

Vegetation on disturbed land (if present) will typically have a high predominance of non-native, weedy species that are indicators of surface disturbance and/or soil compaction, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), mustard (*Brassica* spp.),

castor bean (*Ricinus communis*), tumbleweed (*Amaranthus albus*), sweet fennel (*Foeniculum vulgare*), white horehound (*Marrubium vulgare*), filarees (*Erodium* spp.), and common sow-thistle (*Sonchus oleraceus*). Although non-native grasses may be present on disturbed lands, they do not dominate the vegetative cover. Disturbed habitat is typically found in vacant lots, roadsides, and material storage areas (SDG&E 2023).

Within the survey area, this habitat was found primarily along paved roads, such as Japatul Valley Road and La Cresta Road, and within vacant lots near the unincorporated community of Crest. Species commonly observed within the survey area in this vegetation community include brome grasses (*Bromus* spp.), filarees, Russian thistle, San Diego County viguiera, short podded mustard (*Hirschfeldia incana*), telegraph weed, and wild oats (*Avena* spp.).

Bare Ground

Bare ground land cover includes areas of native or imported soils that are unvegetated and consist of mostly exposed ground. This land cover may include the following:

- graded lands or land with other significant topsoil disturbance;
- naturally occurring bare areas;
- lands lacking biological value;
- lands subject to repeated and/or regular clearing for fuel management or O&M purposes (including unpaved access roads);
- maintained work areas, staging yards, equipment, and other construction-related activities;
- off-highway vehicles or hiking trails; and
- sites from old homes or other structures (SDG&E 2023).

Within the survey area, this land cover primarily includes unpaved roads used to access residential homes and existing electrical infrastructure.

Concrete-Lined Channel

Concrete-lined channel land cover refers to a permanent drainage feature that has been constructed with concrete material. Within the survey area, this land cover exists adjacent to a private driveway near the proposed 230 kV western UG segment. The drainage feature directs surface runoff into an aquatic feature.

3.5.2.2 Aquatic Resources

Although further detailed in the Biological Resources Technical Report (Insignia 2026a) and Aquatic Resources Delineation Report (Insignia 2026b), areas under the jurisdiction of the United States (U.S.) Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) were mapped within the survey area, pursuant to Sections 404 and 401 of the Clean Water Act (CWA), respectively. California Department of Fish and Wildlife- (CDFW-) jurisdictional features were also mapped within the survey area, pursuant to Section 1602 of the California Fish and Game Code. Potential wetlands under the jurisdiction of the USACE were identified within the survey area near the Loveland Reservoir due to the dominance of hydrophytic vegetation and/or wetland hydrology (i.e., inundation visible on aerial imagery). Soil analysis was not completed in areas where these features are located outside of proposed work

areas or where there was restricted access. Potentially jurisdictional aquatic resources within the survey area are detailed in Table 3.5-2: Summary of Potentially Jurisdictional Aquatic Features within the Survey Area and depicted in Attachment 3.5-B: Aquatic Resources within the Survey Area.

Table 3.5-2: Summary of Potentially Jurisdictional Aquatic Features within the Survey Area

Feature Type	Approximate Length (linear feet)	Approximate Jurisdictional Area (acres)[1]		
		USACE	RWQCB	CDFW
Ephemeral Non-Wetland Waters	29,916	Not Applicable (N/A)	1.60	2.66
Intermittent Non-Wetland Waters	4,022	0.56	0.56	1.16
Perennial Non-Wetland Waters	793	0.58	0.58	0.60
Wetlands	N/A	7.17	7.17	7.17
Total	**34,731**	**7.78**	**9.91**	**11.59**

Note: The area within the ordinary high water mark (OHWM) was used to measure the area of non-wetland waters under the jurisdiction of the USACE and RWQCB. The distance between each top of bank (TOB) was used to measure the area of non-wetland waters under the jurisdiction of the CDFW. Areas exhibiting wetland vegetation, hydrology, or soils within the OHWM were included as non-wetland waters per USACE regional guidance (USACE 2008).

3.5.2.3 Natural Vegetation Communities

Natural communities[3] were considered sensitive if they met one or more of the following criteria:

- sensitive vegetation communities or habitats identified in local or regional plans, policies, or regulations, or designated by the CDFW[4] or U.S. Fish and Wildlife Service (USFWS);
- areas that provide habitat for locally unique biotic species/communities (e.g., oak woodlands, grasslands, and forests);
- habitat that contains or supports rare, endangered, or threatened wildlife or plant species as defined by the CDFW and USFWS;
- habitat that supports CDFW Species of Special Concern (SSC);
- areas that provide habitat for rare or endangered species and that meet the definition in Section 15380 of the California Environmental Quality Act Guidelines;
- areas within existing game and wildlife refuges and reserves;
- lakes, wetlands, estuaries, lagoons, streams, and rivers; and
- riparian corridors.

[3] The CDFW uses the Manual of California Vegetation (Second Edition) (Sawyer et al. 2009) as the classification system to identify vegetation communities. This is a different classification system than the one typically used by SDG&E that is based on the Holland classification system (Oberbauer et al. 2008).

[4] The CDFW's Rarity Ranking follows NatureServe's Heritage Methodology (Faber-Langendoen et al. 2016) in which communities are given a G (global) and S (state) rank based on their degree of imperilment (as measured by rarity, trends, and threats). Communities with a Rarity Ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive by the CDFW. Some communities may be ranked as S4 (apparently secure) at the alliance level; however, some associations within the alliance may be considered sensitive.

Multiple sensitive natural vegetation communities and habitats are located within the survey area. Generally, these communities and habitats are associated with riparian corridors and streams along Taylor Creek, Sweetwater River, Forester Creek, and their tributaries. Riparian forest, riparian woodland, and coast live oak riparian forest associated with these features provide habitat for several locally unique and rare species, including delicate clarkia (*Clarkia delicata*), least Bell's vireo (*Vireo bellii pusillus*), and arroyo toad (*Anaxyrus californicus*). Upland habitat, including coastal sage scrub and coastal sage/chaparral mix, also provides habitat for unique species, including coastal California gnatcatcher (*Polioptila californica californica*), Hermes copper butterfly (*Lycaena hermes*), and San Diego County viguiera.

Vegetation communities identified as sensitive by the CDFW are located within the survey area within both upland and riparian vegetation communities. In general, chaparral and coastal sage scrub vegetation communities are not designated as sensitive; however, some associations of the alliances observed within the survey area are considered sensitive by the CDFW (CDFW 2025a). Riparian vegetation communities are typically considered sensitive due to the regional losses of these habitats and the number of species supported by these habitats. Observed CDFW sensitive natural communities include the following alliances and associations:

- *Ceanothus* (*oliganthus*, *tomentosus*) Shrubland Alliance – Hairy leaf - woolly leaf ceanothus chaparral (S3);
- *Xylococcus bicolor* Shrubland Alliance – Mission manzanita chaparral (S3);
- *Platanus racemosa* - *Quercus agrifolia* Woodland Alliance – California sycamore – coast live oak riparian woodlands (S3);
- *Quercus engelmannii* Forest and Woodland Alliance – Engelmann oak woodland and forest (S3);
- *Salix gooddingii – Salix laevigata* Forest and Woodland Alliance – Goodding's willow - red willow riparian woodland and forest (S3); and
- *Adenostoma fasciculatum – Salvia* spp. Shrubland Alliance – Chamise – Sage chaparral (S4), which includes the following:

    - *Adenostoma fasciculatum – Salvia apiana* Association (S3),
    - *Artemisia californica* – (*Salvia leucophylla*) Shrubland Alliance – California sagebrush – (purple sage) scrub (S5), and
    - *Artemisia californica – Eriogonum fasciculatum – Viguiera laciniata* Association (no current CDFW rarity ranking).

These sensitive natural communities are located within the more broadly mapped classifications of chaparral, coastal sage scrub, coastal sage/chaparral mix, riparian forest, riparian woodland, and open Engelmann oak woodland. These broad classifications are defined in SDG&E's 2023 Habitat Conservation Plan (HCP) Amendment vegetation classification, which was utilized to map vegetation communities and land covers discussed in this analysis. Coast live oak riparian forest is also considered sensitive since it provides habitat for locally unique biotic species. However, the coast live oak riparian forest observed within the survey area does not align with a sensitive natural community identified by the CDFW under the Manual of California Vegetation classification (California Native Plant Society [CNPS] 2025a). The entirety of these vegetation communities are considered sensitive natural communities for the purposes of this analysis.

3.5.2.4 Special-Status Plant and Wildlife Species

Special-status plant and wildlife species were evaluated to determine their potential to occur within the survey area. A species' potential to occur within the survey area was evaluated based on the species' range and habitat requirements, as well as the proximity of the survey area to known occurrences of the species and the date of those records. Species were designated as one of the following:

- **Present** – This species was positively identified visually or aurally during the pre-activity survey, focused or protocol-level surveys, or incidentally. Positively identified scat, tracks, or other physical markers confirm presence as well.

- **High Potential** – Recent occurrence data (i.e., within the past 20 years) indicate that the species has been known to occur within the vicinity of the Proposed Project (i.e., within 1 mile) and is likely to be found in the survey area (i.e., survey area) during implementation of Proposed Project activities. The area provides moderately to highly suitable habitat, including vegetation composition and density, required soils, hydrologic features, and presence of host plants/food sources as applicable. Some species, such as perennial woody shrubs, may have high potential to occur at a site with recent nearby occurrence records, and habitat may be highly suitable. However, if the species were not observed during the survey, it can be assumed that they are absent because they would have been detected if present.

- **Moderate Potential** – There is a possibility that the species could be found in the survey area during implementation of Proposed Project activities, where either:

  - the survey area supports moderately to highly suitable habitat (including vegetation, soils, hydrology, and food availability as described previously) and is within the current known distribution of the species, but there are historical observations (i.e., occurrence records are older than 20 years) and/or the record is within 1 mile from the survey area; or

  - the survey area only supports low-suitable habitat for the species (including vegetation, soils, hydrology, and food availability as described previously), but the species has been observed during recent surveys within the vicinity (i.e., 1 mile) of the survey area.

- **Low Potential** – The species is not expected to be found in the survey area during implementation of Proposed Project activities, due to the following conditions:

  - the survey area provides low-quality, suitable habitat (including vegetation, soils, hydrology, and food availability as described previously);

  - barriers to wildlife migration or dispersal are present (e.g., an arroyo toad [*Anaxyrus californicus*] location is within 1 mile, but it is in the next canyon over from the survey area with little to no connectivity to the survey area);

- nearby occurrence records are dated (i.e., greater than 20 years old) or are more than 1 mile from the survey area; or

- predators or invasive species that inhibit survival or occupation are present.

- **Absent** – The survey area does not provide suitable habitat, the species is known to be restricted to habitats or specific areas outside of the survey area, and/or the species is considered extirpated from the area.

3.5.2.4.1 Plants

Special-status plant species include the following:

- U.S. Forest Service (USFS) Sensitive (USFSS) Species;

- species covered by SDG&E's HCP Amendment (SDG&E 2023) and Subregional Natural Community Conservation Plan (NCCP) (SDG&E 1995),

- species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (Title 50 Code of Federal Regulations [Code of Fed. Regs.] Section 17.12 [listed plants], and various notices in the Federal Register [FR] [proposed species]);

- species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR § 40, February 28, 1996);

- species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (Title 14 California Code of Regulations [Cal. Code Regs.] Section 670.5);

- species that meet the definitions of rare and endangered under the California Environmental Quality Act (CEQA);[5]

- species listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and

- species considered by the CNPS to be "rare, threatened or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B, 2A, and 2B), as well as CRPR 3 and 4 plant species:

  - 1A, which is the designation for plants that are presumed extinct in California and rare/extinct elsewhere;
  - 1B, which is the designation for plants that are rare or endangered in California and elsewhere;

[5] CEQA Guidelines Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if it is not on one of the official lists.

- 2A, which is the designation for plants that are presumed extirpated in California, but are more common elsewhere;
- 2B, which is the designation for plants that are rare, threatened, or endangered in California, but are more common elsewhere;
- 3, which is the designation for plants about which more information is needed; and
- 4, which is the designation for plants of limited distribution.

Sixty-seven special-status plant species were determined to be present or to have a moderate to high potential to occur within the survey area. The potential to occur evaluations are detailed in Attachment 3.5-C: Special-Status Plant Species with the Potential to Occur and based on prior occurrences within 5 miles of the Proposed Project, as shown in Attachment 3.5-D: Special-Status Plant Species Occurrences in the Vicinity of the Proposed Project . The following eight special-status plant species were observed within the survey area:

- delicate clarkia,
- Engelmann oak,
- Munz's sage,
- Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*),
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*),
- rush like bristleweed (*Xanthisma junceum*),
- San Diego County viguiera, and
- San Diego sagewort (*Artemisia palmeri*).

Special-status plant species observed during focused surveys are depicted in Attachment 3.5-E: Special-Status Plant Species Observed within the Survey Area. A subset of the special-status plant species that were present or have moderate to high potential to occur in the survey area are detailed in Table 3.5-3: Impacts to Suitable Special-Status Plant Species Habitat within the Survey Area, including the potential for each species to occur within the survey area, suitable habitat, and the temporary and permanent impacts to the relative vegetation communities that function as habitat for the species. This subset of special-status plant species was identified based on the methodology described in Section 3.5.4.1 Analysis Methodology.

3.5.2.4.2 Wildlife

Special-status wildlife species include the following:

- USFSS species;
- species listed or proposed for listing as threatened or endangered under the FESA (Title 50 Code of Fed. Regs. Section 17.11 [listed animals] and various notices in the FR [proposed species]);
- species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR § 40, February 28, 1996);
- species listed or proposed for listing by the State of California as threatened or endangered under the CESA (Title 14 Cal. Code Regs. Section 670.5);
- species that meet the definitions of rare and endangered under CEQA;[5]
- species designated by the CDFW as Fully Protected (FP) or as an SSC;

- species protected under the federal Bald and Golden Eagle Protection Act (BGEPA);
- Birds of Conservation Concern (BCC) or Watch List (WL) species;
- species covered by SDG&E's HCP Amendment and NCCP; and
- bats considered by the Western Bat Working Group to be "high" or "medium" priority (Western Bat Working Group 2015).

Forty-five special-status wildlife species were determined to be present or to have a moderate to high potential to occur within the survey area. The potential to occur evaluations are detailed in Attachment 3.5-F: Special-Status Wildlife Species with the Potential to Occur and based on prior occurrences within 5 miles of the Proposed Project, as shown in Attachment 3.5-G: Special-Status Wildlife Species Occurrences in the Vicinity of the Proposed Project . The following 11 special-status wildlife species were observed within the survey area:

- bald eagle (*Haliaeetus leucocephalus*),
- coast horned lizard (*Phrynosoma blainvillii*),
- coast patch-nosed snake (*Salvadora hexalepis virgultea*),
- coastal rosy boa (*Lichanura orcutti*),
- coastal whiptail (*Aspidoscelis tigris stejnegeri*),
- Cooper's hawk (*Astur cooperii*),
- least Bell's vireo,
- monarch butterfly (*Danaus plexippus*),
- red-diamond rattlesnake (*Crotalus ruber*),
- yellow-breasted chat (*Icteria virens*), and
- yellow warbler (*Setophaga petechia*).

Special-status wildlife species observed during focused surveys are depicted in Attachment 3.5-H: Special-Status Wildlife Observed within the Survey Area. All special-status wildlife species that were present or have moderate to high potential to occur in the survey area are detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area outlines each species' name, potential to occur within the survey area, suitable habitat, and the temporary and permanent impacts to the relative vegetation communities that function as habitat for the species.

3.5.2.4.3 Suitable Habitat

Prior to evaluating the potential impacts to suitable habitat for special-status species within the survey area, suitable habitat was identified for each special-status species. Multiple methods, as described in the following subsections, were used to identify suitable habitat, and only species with a moderate to high potential to occur were considered to have a potential to occur within the Proposed Project survey area during construction and/or O&M.

Table 3.5-3: Impacts to Suitable Special-Status Plant Species Habitat within the Survey Area

Common Name	Scientific Name	Listing Status[6]	Potential to Occur	Suitable Habitat	Approximate Total Impacts (acres)	
					Temporary	Permanent
Brewer's calandrinia	*Calandrinia breweri*	4.2	High	Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	8.96	7.83
Delicate clarkia	*Clarkia delicata*	1B.2	Present	Coast Live Oak Riparian Forest and Riparian Forest	0.01	0.03
Engelmann oak	*Quercus engelmannii*	4.2	Present	Open Engelmann Oak Woodland, Chaparral, and Coastal Sage Scrub/Chaparral Mix	8.96	7.83
Golden-rayed pentachaeta	*Pentachaeta aurea* ssp. *aurea*	4.2	Moderate	Woodlands, Non-Native Grassland, Chaparral, Coastal Sage Scrub/Chaparral Mix, Coastal Sage Scrub, and Riparian Woodland	11.15	7.83
Graceful tarplant	*Holocarpha virgata* ssp. *elongata*	4.2	Moderate	Woodlands, Non-Native Grassland, Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	11.15	7.83
Hammitt's clay-cress	*Sibaropsis hammittii*	1B.2, USFSS	Moderate	Non-Native Grassland and Chaparral	5.66	4.27
Long-spined spineflower	*Chorizanthe polygonoides* var. *longispina*	1B.2	Moderate	Non-Native Grassland, Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	11.15	7.83
Mission Canyon bluecup	*Githopsis diffusa* ssp. *filicaulis*	3.1	Moderate	Chaparral	3.47	4.27
Munz's sage	*Salvia munzii*	2B.2	Present	Coastal Sage Scrub	4.54	3.00
Palmer's grapplinghook	*Harpagonella palmeri*	4.2	Moderate	Non-Native Grassland, Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	11.15	7.83
Palmer's goldenbush	*Ericameria palmeri* var. *palmeri*	1B.1	Present	Coast Live Oak Riparian Forest and Chaparral	3.48	4.30
Parry's spineflower	*Chorizanthe parryi* var. *parryi*	1B.1, USFSS	Moderate	Woodlands, Non-Native Grassland, Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	11.15	7.83
Payson's jewel-flower	*Caulanthus simulans*	4.2, USFSS	Moderate	Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	8.96	7.83
Peninsular spineflower	*Chorizanthe leptotheca*	4.2	High	Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	8.96	7.83
Robinson's pepper-grass	*Lepidium virginicum* var. *robinsonii*	4.3	Present	Coastal Sage Scrub	4.54	3.00
Rush like bristleweed	*Xanthisma junceum*	4.3	Present	Chaparral and Coastal Sage Scrub/Chaparral Mix	8.96	7.83
San Diego County viguiera	*Bahiopsis laciniata*	4.3	Present	Coastal Sage Scrub	4.54	3.00
San Diego milk-vetch	*Astragalus oocarpus*	1B.2, USFSS	High	Woodlands and Chaparral	3.47	4.27
San Diego sagewort	*Artemisia palmeri*	4.2	Present	Coast Live Oak Riparian Forest	0.01	0.03
Short-bracted bird's-beak	*Cordylanthus rigidus* ssp. *brevibracteatus*	4.3	Moderate	Chaparral	3.47	4.27
Small-flowered morning-glory	*Convolvulus simulans*	4.2	Moderate	Non-Native Grassland, Chaparral, Coastal Sage Scrub/Chaparral Mix, and Coastal Sage Scrub	11.15	7.83
Small-headed monardella	*Monardella breweri* ssp. *microcephala*	2B.2	High	Woodlands and Chaparral	3.47	4.27

Source: Insignia 2026a

[6] Explanation of federal and state listing codes:

Federal listing codes:
-FE: Federally listed as endangered
-FT: Federally listed as threatened
-USFSS: USFS Sensitive

State listing codes:
-SE: State-listed as endangered
-SR: State-listed as rare

CNPS CRPRs:
-1B: Rare, threatened, or endangered in California and elsewhere
-2B: Rare, threatened, or endangered in California, but more common elsewhere
-3: Needs review; plants about which more information is needed
-4: Uncommon in California and of limited distribution; a watch list

CRPR Threat Codes:
-0.1: Seriously threatened in California (over 80 percent of occurrences threatened, with a high degree and immediacy of threat)
-0.2: Moderately threatened in California (20 to 80 percent occurrences threatened, with a moderate degree and immediacy of threat)
-0.3: Not very threatened in California (less than 20 percent of occurrences threatened, with a low degree and immediacy of threat or no current threats known)

Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area

Common Name	Scientific Name	Listing Status[7]	Potential to Occur	Suitable Habitat	Approximate Total Impacts (acres)	
					Temporary	Permanent
Amphibians						
Arroyo toad	*Anaxyrus californicus*	FE, SSC	High	Buckwheat Scrub (Upland Habitat)	0.10	0.27
				Coast Live Oak Riparian Forest (Upland Habitat)	0.01	0.03
				Coastal Sage Scrub (Upland Habitat)	0.06	0.13
				Coastal Sage/Chaparral Mix (Upland Habitat)	0.01	0.01
Large-blotched salamander	*Ensatina eschscholtzii klauberi*	WL, USFSS	Moderate	Coast Live Oak Riparian Forest (Upland Habitat)	0.01	0.03
Western spadefoot	*Spea hammondii*	FPT, SSC	High	Buckwheat Scrub (Upland Habitat)	0.27	0.10
				Chaparral (Upland Habitat)	2.23	2.26
				Coast Live Oak Riparian Forest (Upland Habitat)	0.03	0.01
				Coastal Sage Scrub (Upland Habitat)	0.83	3.10
				Coastal Sage/Chaparral Mix (Upland Habitat)	0.53	0.82
				Landscaped/Ornamental (Upland Habitat)	0.01	1.08
				Non-Native Grassland (Upland Habitat)	0.00	2.19
Birds						
Bald eagle	*Haliaeetus leucocephalus*	SE, FP, USFSS, BGEPA	Present	Riparian Woodland, Non-Vegetated (Foraging Only)	0.00	0.00
Bell's sparrow	*Artemisiospiza belli belli*	WL	Moderate	Coastal Sage Scrub/Chaparral Mix, Chaparral, and Coastal Sage Scrub (Foraging and Nesting)	8.96	7.83
Coastal California gnatcatcher	*Polioptila californica californica*	FT, SSC	Moderate	Buckwheat Scrub and Coastal Sage Scrub (Foraging and Nesting)	4.64	3.27
Cooper's hawk	*Astur cooperii*	WL	Present	Woodlands, Riparian Forest, Coast Live Oak Forest, and Coast Live Oak Riparian Forest (Foraging and Nesting)	0.01	0.03
Golden eagle	*Aquila chrysaetos*	FP, WL, BGEPA	Moderate	Non-Native Grassland, Chaparral, Coastal Sage Scrub, Coastal Sage Scrub/Chaparral Mix, and Woodlands and Forests (Foraging Only)	11.15	7.83
Gray vireo	*Vireo vicinior*	SSC, USFSS	High	Chaparral (Foraging and Nesting)	3.47	4.27
Least Bell's vireo	*Vireo bellii pusillus*	FE, SE	Present	Buckwheat Scrub (Upland) (Foraging Only)	0.02	0.02
				Coast Live Oak Riparian Forest (Riparian) (Foraging Only)	0.01	0.03

[7] Explanation of federal and state listing codes:

Federal listing codes:

-FE: Federally listed as endangered
-FT: Federally listed as threatened
-FPT: Federally proposed for listing as threatened
-BGEPA: BGEPA protected
-USFSS: USFS Sensitive

State listing codes:

-SSC: SSC
-WL: Watch list species
-SE: State-listed as endangered
-ST: State-listed as threatened
-SCE: State candidate for listing
-FP: Fully protected species

Common Name	Scientific Name	Listing Status[7]	Potential to Occur	Suitable Habitat	Approximate Total Impacts (acres)	
					Temporary	Permanent
Prairie falcon	*Falco mexicanus*	WL	Moderate	Non-Native Grassland, Buckwheat Scrub, Coastal Sage Scrub, and Coastal Sage Scrub/Chaparral Mix (Foraging and Nesting)	11.25	8.11
Sharp-shinned hawk	*Accipiter striatus*	WL	Moderate	Riparian Woodland and Riparian Forest (Foraging and Nesting)	0.00	0.00
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	SSC, USFSS	Moderate	Chaparral (Foraging and Nesting)	3.47	4.27
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC	Moderate	Riparian Woodland and Riparian Forest (Foraging and Nesting)	0.00	0.00
Yellow warbler	*Setophaga petechia*	SSC	Present	Riparian Forest and Coast Live Oak Riparian Forest (Foraging and Nesting)	0.01	0.03
Yellow-breasted chat	*Icteria virens*	SSC	Present	Riparian Forest, Coast Live Oak Riparian Forest, and Riparian Woodland (Foraging and Nesting)	0.01	0.03
Insects						
Crotch's bumble bee	*Bombus crotchii*	SCE	Moderate	Coastal Sage Scrub/Chaparral Mix, Buckwheat Scrub, Non-Native Grassland, Chaparral, and Coastal Sage Scrub	11.25	8.11
Hermes copper butterfly	*Lycaena hermes*	FT, USFSS	High	Buckwheat Scrub, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	9.06	8.11
Monarch butterfly	*Danaus plexippus*	FPT, USFSS	Present	Chaparral, Coastal Sage Scrub/Chaparral Mix, Coastal Sage Scrub, Landscaped/Ornamental, Disturbed, Buckwheat Scrub, Agriculture, Open Oak Woodland, Open Engelmann Oak Woodland, Non-Native Grassland, Coast Live Oak Riparian Forest, Riparian Woodland, Non-Vegetated, and Riparian Forest	32.42	8.22
Quino checkerspot butterfly	*Euphydryas editha quino*	FE	Moderate	Coastal Sage Scrub	4.54	3.00
Mammals						
American badger	*Taxidea taxus*	SSC	High	Coastal Sage Scrub, Non-Native Grassland, and Buckwheat Scrub	6.83	3.27
Big free-tailed bat	*Nyctinomops macrotis*	SSC	Moderate	Chaparral	3.47	4.27
Fringed myotis	*Myotis thysanodes*	USFSS	Moderate	Riparian Woodland, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.26	8.14
Mexican long-tongued bat	*Choeronycteris mexicana*	SSC	Moderate	Landscaped/Ornamental	1.31	0.01
Pallid bat	*Antrozous pallidus*	SSC, USFSS	Moderate	Riparian Woodland, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.26	8.14
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC	Moderate	Coastal Sage Scrub/Chaparral Mix, Chaparral, and Coastal Sage Scrub	8.96	7.83
San Diego desert woodrat	*Neotoma lepida intermedia*	SSC	Moderate	Buckwheat Scrub, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	9.06	8.11
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, USFSS	Moderate	Riparian Woodland, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.26	8.14
Western mastiff bat	*Eumops perotis californicus*	SSC	Moderate	Riparian Woodland, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.26	8.14
Western red bat	*Lasiurus blossevillii*	SSC	Moderate	Oak woodland, Riparian Woodland, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.26	8.14
Western yellow bat	*Lasiurus xanthinus*	SSC	Moderate	Riparian Woodland, Riparian Forest, Coast Live Oak Forest, and Coast Live Oak Riparian Forest	0.01	0.03

Common Name	Scientific Name	Listing Status[7]	Potential to Occur	Suitable Habitat	Approximate Total Impacts (acres)	
					Temporary	Permanent
Reptiles						
California glossy snake	*Arizona elegans occidentalis*	SSC	Moderate	Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.25	8.11
Coast horned lizard	*Phrynosoma blainvillii*	SSC	Present	Woodlands, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.25	8.11
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC	Present	Buckwheat Scrub, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	9.06	8.11
Coastal rosy boa	*Lichanura orcutti*	USFSS	Present	Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	8.96	7.83
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	Present	Woodlands, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	9.07	8.14
Coronado skink	*Plestiodon skiltonianus interparietalis*	WL	High	Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.25	8.11
Orange-throated whiptail	*Aspidoscelis hyperythra*	WL, USFSS	High	Buckwheat Scrub, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	9.06	8.11
Red-diamond rattlesnake	*Crotalus ruber*	SSC, USFSS	Present	Woodlands, Riparian Forest, Coast Live Oak Forest, Coast Live Oak Riparian Forest, Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.26	8.14
San Diego banded gecko	*Coleonyx variegatus abbotti*	SSC	Moderate	Buckwheat Scrub, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	9.06	8.11
San Diego mountain kingsnake	*Lampropeltis zonata pulchra*	USFSS	Moderate	Riparian Woodland, Riparian Forest, Coast Live Oak Forest, and Coast Live Oak Riparian Forest	0.01	0.03
San Diego ringneck snake	*Diadophis punctatus similis*	USFSS	Moderate	Buckwheat Scrub, Non-Native Grassland, Coastal Sage Scrub, Chaparral, and Coastal Sage Scrub/Chaparral Mix	11.25	8.11
Southern California legless lizard	*Anniella stebbinsi*	SSC, USFSS	High	Coastal Sage Scrub, Chaparral, Coastal Sage Scrub/Chaparral Mix, Riparian Woodland, Riparian Forest, and Coast Live Oak Riparian Forest	8.97	7.87
Southwestern pond turtle	*Actinemys pallida*	FPT, SSC, USFSS	Moderate	Buckwheat Scrub (Upland Habitat)	0.02	0.02
				Coast Live Oak Riparian Forest (Upland Habitat)	0.01	0.03
Two-striped gartersnake	*Thamnophis hammondii*	SSC, USFSS	High	Coastal Sage Scrub, Chaparral, Coastal Sage Scrub/Chaparral Mix, Woodlands, Riparian Forest, and Coast Live Oak Riparian Forest	8.97	7.87

Source: Insignia 2026a

For the majority of special-status species, suitable habitat corresponds to the vegetation communities and land covers identified in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area and as listed in Table 3.5-3: Impacts to Suitable Special-Status Plant Species Habitat within the Survey Area and Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. This method is most appropriate for special-status species that are generalists and have the potential to occur in a wide range of habitats.

Multiple special-status species with the potential to occur are considered specialists and require unique physical and biological features in the environment. Species-specific methods for identifying suitable habitat for special-status plant species, arroyo toad, western spadefoot (*Spea hammondii*), least Bell's vireo, and southwestern pond turtle (*Actinemys pallida*) were utilized as described in the subsections that follow. Because focused or protocol-level surveys have not occurred, a more general approach was also utilized for identifying Hermes copper butterfly and Quino checkerspot butterfly (*Euphydryas editha quino*) habitat.

Special-Status Plant Species Suitable Habitat

The results of the botanical field surveys were considered in determining suitable habitat for special-status plant species. If a special-status shrub or perennial herb species with a moderate to high potential to occur was not detected during the botanical field surveys, then this species was not considered to have suitable habitat within the survey area. Because rainfall quantities and timing were not optimal for the current botanical field surveys, annual and geophytic special-status plant species were assumed to be present within suitable habitat. These species may occur within the survey area, but potentially were not detected due to environmental conditions when the botanical field surveys were conducted.

Arroyo Toad Suitable Habitat

Arroyo toad suitable habitat is limited to the aquatic/breeding and adjacent upland habitats along Taylor Creek, Sweetwater River, and their tributaries. Tributaries containing suitable aquatic/breeding habitat are located within intermittent drainages on CNF-managed lands between proposed Poles 52 and 55, as depicted on Map 51 through Map 56 of Attachment 3.5-B: Aquatic Resources within the Survey Area. Adjacent upland habitat within 500 feet of the aquatic/breeding habitat is also considered suitable habitat for this species. This upland habitat buffer is reduced in areas where topography (e.g., steep hillsides) limits arroyo toad movement into adjacent upland habitat.

Western Spadefoot Suitable Habitat

Western spadefoot suitable habitat is located throughout the survey area where suitable aquatic/breeding occurs within ephemeral, intermittent, and perennial drainages. Adjacent upland habitat within 500 feet of the aquatic/breeding habitat is also considered suitable habitat for this species. This upland habitat buffer is reduced in areas where topography (e.g., steep hillsides) limits western spadefoot movement into adjacent upland habitat. Additionally, drainages located on steep hillsides are not considered suitable aquatic/breeding habitat because water is not likely to remain pooled for extended periods (i.e., 30 days) due to the soil and slope conditions.

Least Bell's Vireo Suitable Habitat

Least Bell's vireo suitable habitat was identified based on the presence of individuals observed during the survey and the composition and structure of vegetation within riparian habitats. Least Bell's vireo suitable habitat is limited to riparian habitats along Taylor Creek and Sweetwater River by Loveland Reservoir where this species is known to occur and where vegetation is multi-layered and found in large contiguous patches. Riparian habitat in other portions of the survey area occurs in isolated patches, is small in size, or lacks multi-layered vegetation. For instance, coast live oak trees are dominant along some drainages and shade out the understory, resulting in limited undergrowth.

Southwestern Pond Turtle Suitable Habitat

Southwestern pond turtle suitable habitat is limited to the aquatic/breeding and adjacent upland habitats along Taylor Creek and Sweetwater River by Loveland Reservoir. Depending on water levels in the reservoir, this is the only location in the survey area where open water would occur and potentially function as suitable aquatic/breeding habitat for this species. Adjacent upland habitat within 165 feet of the aquatic/breeding habitat is also considered suitable for this species.

3.5.2.4.4 Critical Habitat

NOAA Fisheries Endangered Species Act Critical Habitat

No National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) FESA critical habitat was identified within the Proposed Project Area (NOAA Fisheries 2025a, 2025b).

USFWS-Designated Critical Habitat

As depicted in Figure 3.5-1: Critical Habitat within the Vicinity of the Proposed Project Area, USFWS-designated critical habitat for arroyo toad and Hermes copper butterfly is located within the survey area. In total, the Proposed Project alignment would cross approximately 0.8 mile of arroyo toad critical habitat. In addition, the survey area overlaps approximately 27.57 acres of arroyo toad critical habitat, which is associated with Taylor Creek and the Sweetwater River where these features flow into the eastern portion of Loveland Reservoir.

In total, the Proposed Project alignment would cross approximately 3.1 miles of Hermes copper butterfly critical habitat, and the survey area overlaps approximately 129.57 acres of Hermes copper butterfly critical habitat. Hermes copper butterfly critical habitat overlaps the survey area at four discrete locations: within Endangered Habitats Conservancy, a non-profit organization; within private lands along La Cresta Road; within the Sweetwater Preserve northeast of Loveland Reservoir; and within CNF-managed lands along Japatul Road and in the vicinity of the existing Suncrest Substation.

Critical habitat for coastal California gnatcatcher, least Bell's vireo, San Diego ambrosia (*Ambrosia pumila*), and San Diego thornmint (*Acanthomintha ilicifolia*) is located within 5 miles of the survey area, but none of this critical habitat overlaps the survey area. The coastal California gnatcatcher critical habitat nearest to the survey area is located in the vicinity of McGinty Mountain approximately 1.5 miles south of the survey area, and in the vicinity of El Captain Reservoir and Lake Jennings approximately 2.9 miles north of the survey area.

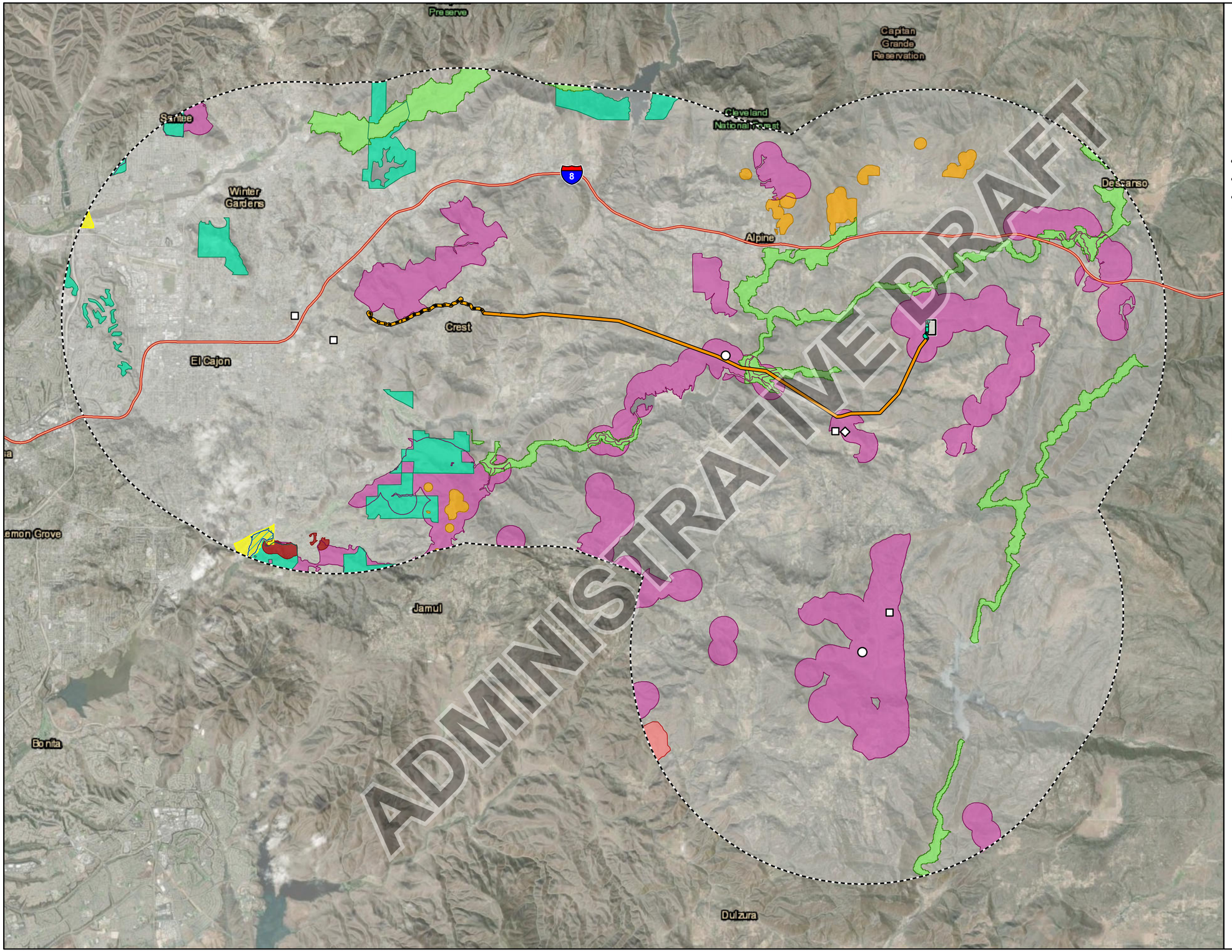


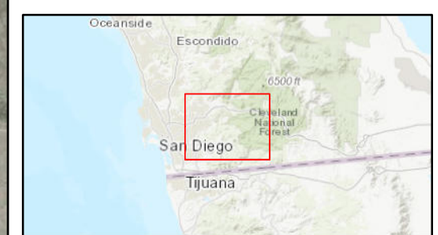
Figure 3.5-1:
Critical Habitat within the Vicinity of the Proposed Project Area

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 5-Mile Buffer

Critical Habitat

- Arroyo Toad (*Anaxyrus californicus*)
- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Hermes Copper Butterfly (*Lycaena hermes*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- San Diego Ambrosia (*Ambrosia pumila*
- San Diego Thorn-mint (*Acanthomintha ilicifolia*)
- Southwestern Willow Flycatcher (*Empidonax traillii extimus*)
- Quino Checkerspot Butterfly (*Euphydryas editha quino*)



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Least Bell's vireo and San Diego ambrosia critical habitat are located near the Sweetwater River, approximately 4.8 miles southwest of the survey area. San Diego thornmint critical habitat is located in the vicinity of McGinty Mountain approximately 3.9 miles south of the survey area, and in the vicinity of Viejas Mountain approximately 3 miles north of the survey area.

3.5.2.5 Regional Wildlife Corridors

Wildlife migration corridors are areas that connect suitable wildlife habitats in a region that would otherwise be fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features (e.g., canyon drainages, ridgelines, or areas with vegetation cover) provide corridors for wildlife travel. Wildlife corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high-population or high-density areas; and facilitate genetic diversity. The CEQA Guidelines require that project proponents assess, disclose, and mitigate for significant impacts on wildlife corridors. Impacts to wildlife corridors (e.g., human disturbance and development), can cause harm to migrating species, cause species to exceed population thresholds in fragmented patches, or prevent healthy gene flow between populations.

The California Essential Habitat Connectivity (CEHC) Project maintains a statewide Essential Habitat Connectivity Map, which broadly depicts large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas) (Spencer et al. 2010). As depicted in Figure 3.5-2: Regional Wildlife Corridors within the Vicinity of the Proposed Project Area, Natural Landscape Blocks are crossed by the proposed 230 kV western UG segment in the western portion of the survey area and just west of the unincorporated community of Crest. This portion of the Proposed Project Area provides connectivity between open space around McGinty Mountain to the south and the Crestridge Ecological Reserve to the north of the survey area. Natural Landscape Blocks are also crossed in the eastern portion of the Proposed Project Area. Within the Proposed Project Area, the Natural Landscape Block extends from the Sweetwater River and continues to the existing Suncrest Substation. This portion of the Proposed Project Area provides connectivity between CNF-managed lands that extend throughout eastern San Diego County. In total, the Proposed Project alignment would cross approximately 6.30 miles of Natural Landscape Blocks. The greatest barriers to wildlife movement include urbanized areas associated with the unincorporated communities of Crest and Alpine, which overlap the Proposed Project Area.

The Proposed Project lies within the Pacific Flyway—an important north-south migration corridor that runs along the Pacific coast of the Americas from Alaska to Patagonia, including all of North America west of the Rocky Mountains. The Pacific Flyway links breeding grounds to the north with wintering areas to the south and is used by many different species of birds during migration. The nearest Important Bird Area (IBA) designated by the California Audubon is located approximately 2.10 miles to the south of the Proposed Project Area in the vicinity of McGinty Mountain. This IBA extends to the south and is within the San Diego National Wildlife Refuge (Audubon 2025). Within the Proposed Project Area, high-quality riparian habitats are located along drainages, including Taylor Creek and the Sweetwater River. The riparian habitats support breeding least Bell's vireo and likely function as important stopover habitat for migratory birds. The Proposed Project Area also overlaps large areas of relatively intact coastal

sage scrub and chaparral habitats, which likely support coastal sage scrub-dependent species (e.g., coastal California gnatcatcher). Many bird species, including waterfowl and wading birds, likely utilize Loveland Reservoir, which is located adjacent to the Proposed Project Area.

3.5.2.6 Wildlife Nursery Sites

The survey area does not occur within any wildlife nursery sites.[8]

3.5.2.7 Special Habitat Management Areas

As depicted in Figure 3.5-3: Special Habitat Management Areas within the Vicinity of the Proposed Project Area, the Proposed Project Area would cross or be located within 5 miles of multiple HCPs/NCCPs and Multiple Species Conservation Programs (MSCPs). Additionally, the Proposed Project would cross lands within the CNF that are managed under a National Forest Land Management Plan. These management plans are further detailed in individual subsections under Section 3.5.3.3 Local.

In addition, the Proposed Project Area would be located within protected areas; these protected areas are lands that are owned in fee and protected for open space purposes by public agencies, land trusts, or non-profit organizations (GreenInfo Network 2025a and 2025b). More specifically, the proposed 230 kV western UG segment and loop-in to Transmission Line (TL) 23021 of the Proposed Project Area would traverse Crestridge Ecological Reserve, a CDFW-managed land, north of La Cresta Road. The portion of the Proposed Project Area near the proposed 230 kV western UG segment on La Cresta Road would be located within land managed by the Endangered Habitats Conservancy. The proposed 230 kV OH segment near Pole 3 would also cross land managed by the Endangered Habitats Conservancy. Additionally, Poles 21 through 35 and the portion of the Proposed Project Area surrounding these poles would traverse land managed by Sweetwater Authority, a publicly owned water agency. Portions of the proposed 230 kV western UG segment (i.e., west of Pole 2) and the proposed 230 kV OH segment (i.e., near Poles 3, 14, 19, 20, 36, and 37) would be located within private lands that include private open space easements. Lastly, Poles 45 through 57 and the portion of the Proposed Project Area surrounding these poles would traverse CNF-managed lands. The locations of these poles are depicted on multiple map pages in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area. All of these lands are within Preserves[9] or Proposed Preserves[10] included in various HCPs/NCCPs, MSCPs, or a National Forest Land and Resource Management Plan (SDG&E 2024a).

[8] A wildlife nursery site is an area where individuals of the same species breed and raise offspring.

[9] "Preserve" refers to conserved lands within a plan area in a current pending or adopted regional HCP, or other local, state, or federal conservation plan that are legally protected from future development (e.g., via conservation or open space easement, through acquisition, deed restriction, or other methods) for the purpose of protecting natural habitat, species, and open space and/or that are actively managed to protect the open space or natural resources into the future (SDG&E 2023).

[10] "Proposed Preserve" means those lands within the plan area that are not yet legally conserved, but are planned for conservation in a current pending or adopted regional plan, or other local, state, or federal conservation plan (SDG&E 2023).

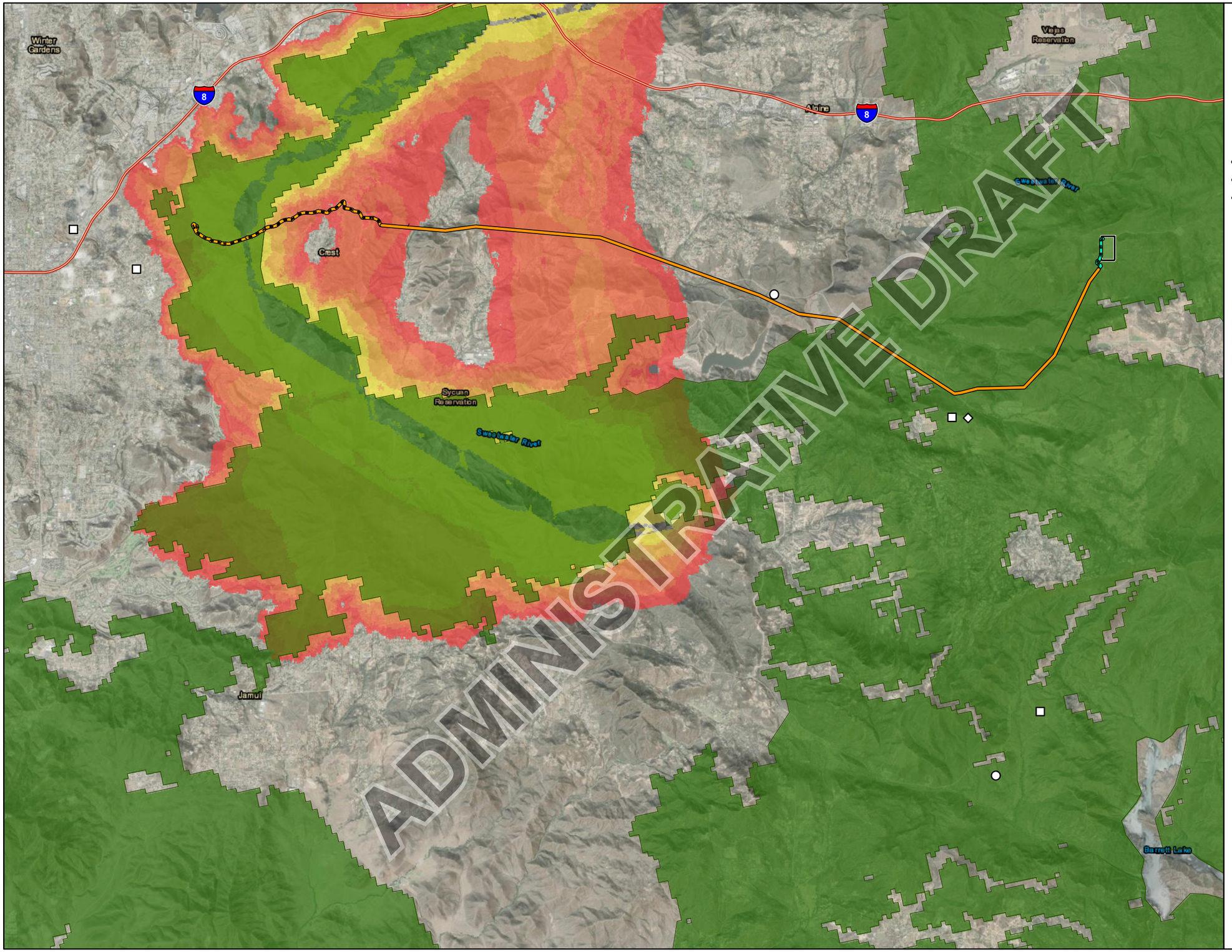

Figure 3.5-2:
Regional Wildlife Corridors within the Vicinity of the Proposed Project Area

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- Natural Landscape Blocks

Regional Wildlife Corridor

- 1 - More Permeable
- 2
- 3
- 4
- 5 - Less Permeable

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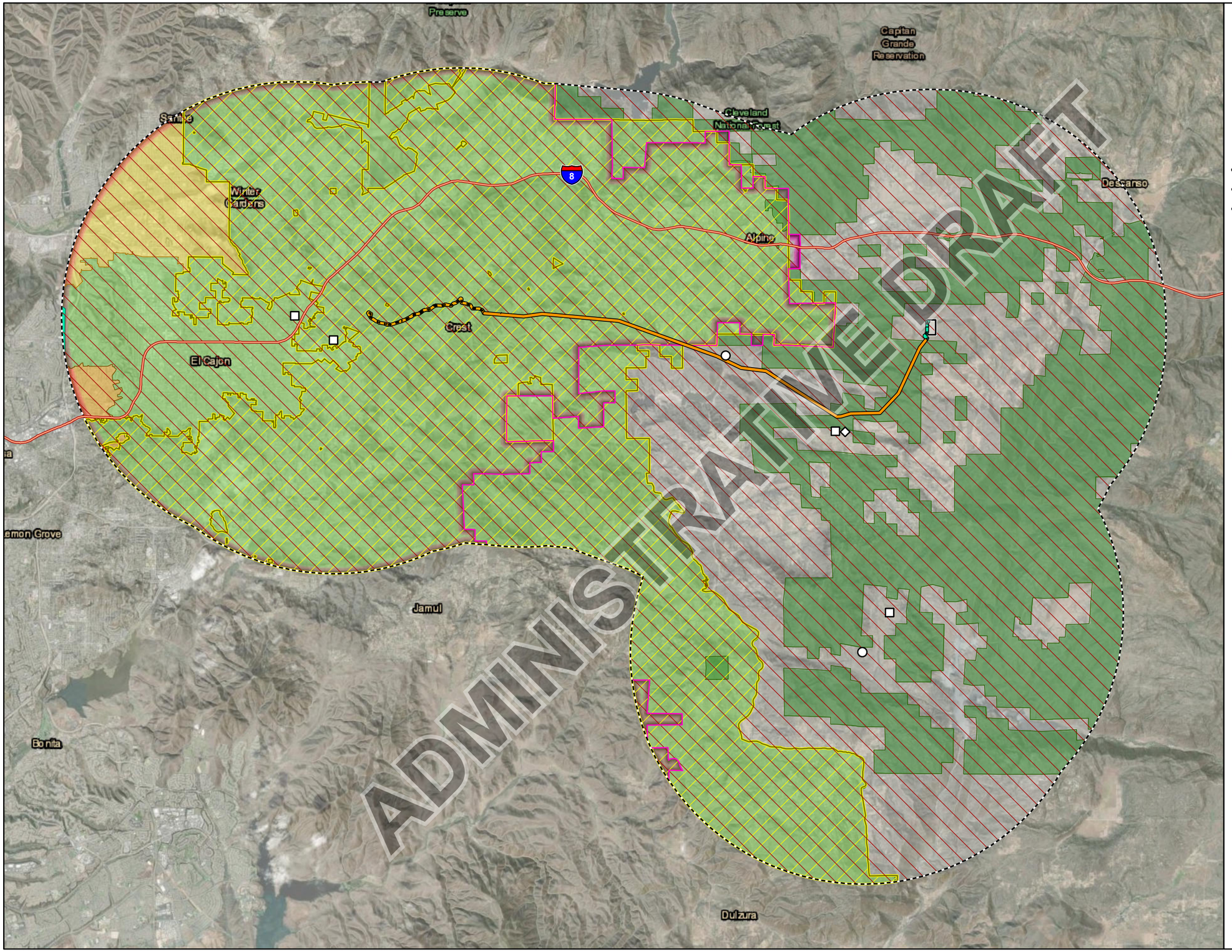


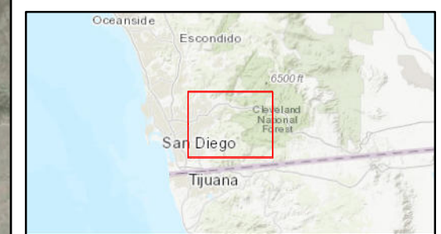
Figure 3.5-3:
Special Habitat Management Areas within the Vicinity of the Proposed Project Area

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 5-Mile Buffer

Special Habitat Management Area

- Cleveland National Forest
- San Diego County Multiple Species Conservation Program (MSCP)
- San Diego County MSCP: City of San Diego Subarea
- San Diego County MSCP: La Mesa Subarea
- San Diego County MSCP: Santee Subarea
- San Diego County MSCP: South San Diego County Subarea
- San Diego County Water Authority
- San Diego Gas & Electric Subregional Plan Area/HCP Amendment Area/LEHCP Area/NCCP Amendment for Wildfire Activities Area



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3.5.3 Regulatory Setting

3.5.3.1 Federal

3.5.3.1.1 National Forest Management Act

The National Forest Management Act was enacted in 1976 to provide for the management and protection of national forests under the jurisdiction of the USFS. The USFS lands surrounding the Proposed Project Area include portions of the CNF. Congress directed the USFS to develop Land and Resource Management Plans and manage national forests for multiple uses and benefits, including protection and management of natural resources; forestry and range land management and research; and community assistance and cooperation with state and local governments. This statute requires that "[r]esource plans and permits, contracts, and other instruments for the use and occupancy of National Forest System lands shall be consistent with the land management plans" (16 U.S. Code [U.S.C.] § 1604[i] [U.S.C. 2025]).

Land and Resource Management Plans are further supplemented with USFS manuals. These manuals contain legal authorities, objectives, policies, responsibilities, instructions, and guidance regularly used by agency employees to complete their work. Forest Service Manual 2600 Wildlife, Fish, and Sensitive Plant Habitat Management (Chapter 2670 - Threatened, Endangered and Sensitive Plants and Animals) directs the USFS to identify, manage, and protect sensitive species. Sensitive species include those plant and animal species identified by a regional forester for which population viability is a concern, as evidenced by the following:

- significant current or predicted downward trends in population numbers or density, and/or
- significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

3.5.3.1.2 Federal Endangered Species Act

The FESA protects plant and wildlife species that are listed as endangered or threatened by the USFWS and NOAA Fisheries. Under Section 9 of the FESA, any take of endangered wildlife is prohibited; "take" is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (16 U.S.C. § 1532[19] and 1538). This can also include the modification of a species' habitat. For plants, pursuant to this statute, it is unlawful to "remove and reduce to possession any such species from areas under Federal jurisdiction; maliciously damage or destroy any such species on any such area; or remove, cut, dig up, or damage or destroy any such species on any other area in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law" (16 U.S.C. § 1538[c]).

Under Section 7 of the FESA, federal agencies are required to consult with the USFWS and/or NOAA Fisheries if the federal action may affect a listed species or designated critical habitat. Through Section 7 consultation and the issuance of a Biological Opinion, the USFWS and/or NOAA Fisheries may include an incidental take statement, allowing for the take of listed species that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Section 10 of the FESA provides for the issuance of incidental take permits (ITPs) for private actions that have no federal involvement through the development of an HCP.

3.5.3.1.3 Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) recognizes international treaties between the U.S. and other countries that have afforded protection to migratory birds and any of their parts, eggs, and nests, from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The MBTA prohibits acts to "pursue, hunt, take, capture, or kill, or attempt to take, capture, or kill" migratory birds and a range of buying, selling, and transporting activities (16 U.S.C. § 703). "Take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to pursue or collect" a bird. Birds, nests, and eggs are all protected. The regulations governing migratory bird permits can be found in Title 50 Code of Fed. Regs. Part 13 (General Permit Procedures) and Part 21 (Migratory Bird Permits) (Code of Fed. Regs. 2025).

3.5.3.1.4 Bald and Golden Eagle Protection Act

The BGEPA affords additional legal protection to bald eagles and golden eagles (*Aquila chrysaetos*). This law prohibits the take, sale, purchase, barter, offer of sale, purchase, or barter, transport, export, or import at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof (16 U.S.C. §§ 668-668d). The BGEPA also defines "take" to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb," and includes criminal and civil penalties for violating the statute. The USFWS further defines the term "disturb" as agitating or bothering an eagle to a degree that causes or is likely to cause injury, or a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior.

3.5.3.1.5 Clean Water Act

Section 404

Section 404 of the CWA requires project proponents to obtain a permit from the USACE before performing any activity involving a discharge of dredged or fill material into waters of the U.S, which include the following:

- navigable waters of the U.S.,
- interstate waters,
- all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce,
- tributaries to any of these waters, and
- wetlands that have a continuous surface connection to the waters of the U.S; and
- intrastate lakes and ponds that are relatively permanent or continuous with flowing water with a surface connection to waters of the U.S.

Section 402

CWA Section 402 regulates construction-related storm water discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, which is administered by the U.S. Environmental Protection Agency (EPA). In California, the State Water Resources Control Board (SWRCB) is authorized by the EPA to oversee the program through the RWQCBs. The Proposed Project Area is within the jurisdiction of the San Diego RWQCB (Region 9).

Section 401

Under CWA Section 401(a)(1), the applicant for a federal license or permit to conduct an activity that may result in a discharge into waters of the U.S. must provide the federal licensing or permitting agency with a certification that any such discharge would not violate state water quality standards. In California, the RWQCBs administer the Section 401 program to prescribe measures for projects that are necessary to avoid, minimize, and mitigate adverse effects on water quality and ecosystems.

3.5.3.1.6 Plant Protection Act of 2000

Some non-native plant species are officially categorized as "noxious weeds" because they are highly invasive or interfere with an area's management objectives, or both. Both the federal and state governments maintain lists of plants that are considered threats to the well-being of the nation or the state. The Federal Noxious Weed Act of 1974, as amended (7 U.S.C. § 2801 et seq.; 88 Stat. 2148), established a federal program to control the spread of noxious weeds. The act was superseded by the federal Plant Protection Act of 2000 (7 U.S.C. § 7701 et seq.; 114 Stat. 438), which consolidated and modernized all major statutes pertaining to plant protection and quarantine (e.g., the Federal Noxious Weed Act and Plant Quarantine Act).

The Plant Protection Act revised the original definition of a "noxious weed" as listed in the Federal Noxious Weed Act to include the following:

> "any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment."

Under the Plant Protection Act, the Secretary of Agriculture was authorized to designate plants as "noxious weeds" by regulation, and to prohibit or restrict all such weeds from entering the U.S. or moving through interstate commerce. The Secretary of Agriculture was also given authority to inspect, seize, and destroy products and to quarantine areas, if necessary, to prevent the spread of such weeds. The Secretary of Agriculture was also authorized to cooperate with other federal, state, and local agencies, farmers' associations, and private individuals in measures to control, eradicate, or prevent or retard the spread of such weeds.

3.5.3.2 State

3.5.3.2.1 California Endangered Species Act

The CESA (California Fish and Game Code §§ 2050-2089.25) was enacted in 1970 and generally parallels the main provisions of the FESA. Pursuant to the CESA, the take, possession, purchase, sale, and import or export of endangered, threatened, or candidate species is prohibited, unless otherwise authorized by permit or in the regulations. Take is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (California Fish and Game Code § 86). The CESA allows for take incidental to otherwise lawful projects. State lead agencies are required to consult with the CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat. Under California Fish and Game Code Section 2081(b), the CDFW can issue an ITP to allow take of a CESA-listed species if such take is incidental to, and not the purpose of, carrying out an otherwise lawful activity. Permittees must implement species-specific avoidance and minimization measures and fully mitigate impacts to species (CDFW 2025b).

3.5.3.2.2 California Environmental Quality Act

CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by local public agencies. In addition to federally- or state-listed species, special-status plants and animals receive consideration under CEQA. Special-status species include wildlife SSCs, which are designated by the CDFW. Pursuant to the CEQA Guidelines, some SSCs could be considered "rare" (Title 14 Cal. Code Regs. Section 15380). Any unmitigated impacts to rare species could be considered a "significant effect on the environment" (Title 14 Cal. Code Regs. Section 15382). Thus, SSCs must be considered in any project that undergoes CEQA review and/or that must obtain environmental permits from a public agency.

3.5.3.2.3 California Fish and Game Code Sections 1600-1617

California Fish and Game Code Section 1600 et seq. sets forth guidelines for the protection and conservation of fish and wildlife, including habitat. The law requires any person, state or local governmental agency, or public utility to provide written notification to the CDFW before beginning an activity that would substantially modify the bank or bed of a river, stream, or lake (prior to causing any potential hydrological impacts), and enter into a Lake or Streambed Alteration Agreement (LSAA) with the CDFW that includes measures to protect fish and wildlife resources (CDFW 2025b).

3.5.3.2.4 California Fish and Game Code Sections 3511, 4700, 5050, and 5515

California first began to designate species as "fully protected" prior to the creation of the CESA and the FESA. Lists of fully protected species were initially developed to provide protection to animals (i.e., fish, amphibians, reptiles, birds, and mammals) that were rare or facing possible extinction. Most fully protected species have since been listed as threatened or endangered under the CESA and/or the FESA. Fully protected species may not be taken or possessed at any time, and ITPs cannot be issued for these species under California Fish and Game Code Section 4700 (CDFW 2025b). ITPs cannot be issued for a fully protected species unless its conservation and

management is covered in an NCCP or the project meets the requirements of California Senate Bill 147 for specific project types.

3.5.3.2.5 California Fish and Game Code Sections 3503, 3503.5, and 3513

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 specifies these protections for birds in the orders Falconiformes and Strigiformes (i.e., raptors). Section 3513 also makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird (CDFW 2025b).

3.5.3.2.6 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act requires that the SWRCB and the nine RWQCBs adopt water quality criteria to protect waters of the state. Each RWQCB must prepare and periodically update water quality control plans, also known as basin plans. Each basin plan establishes numerical or narrative water quality objectives to protect established beneficial uses, which include wildlife, fisheries, and their habitats. Projects that affect wetlands or waters of the state, including groundwater, must meet the discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA.

3.5.3.2.7 Native Plant Protection Act (California Fish and Game Code Sections 1900-1913)

The Native Plant Protection Act (NPPA) (California Fish and Game Code §§ 1900-1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW. The California Fish and Game Commission has the authority to designate native plants as "endangered" or "rare" and to protect them from take. The NPPA also stipulates that no person may take or possess any endangered or rare native plant, or any part or product thereof. However, this does not apply to the removal of endangered or rare native plants within a right-of-way (ROW) by the owner of the land or the owner's agent, nor does it apply to the obligation of a publicly or privately owned public utility to provide service to the public (CDFW 2025b).

The CDFW and CNPS, a non-governmental organization, jointly maintain CRPR lists. These lists include plant species of concern in California. Plants appearing on lists 1 and 2 are, in general, considered to meet CEQA Guidelines Section 15380(b) criteria, and adverse effects to these species may be considered significant. Impacts to plants that are on lists 3 and 4 are also considered during CEQA review; however, because these species are typically not as rare as those on lists 1 and 2, impacts to these species are less frequently considered potentially significant.

3.5.3.2.8 California Desert Native Plants Act

The California Desert Native Plants Act (CDNPA) (California Food and Agriculture Code §§ 80001-80006) was created to protect non-listed California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San

Diego counties. Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the CDNPA:

- smoketree (*Psorothamnus spinosa*),
- catclaw (*Senegalia greggii*),
- desert-holly (*Atriplex hymenelytra*),
- desert ironwood (*Olneya tesota*),
- all species of the genus *Parkinsonia* (e.g., palos verdes),
- all species of the genus *Prosopis* (e.g., mesquites),
- all species of the family Agavaceae (e.g., century plants, nolinas, and yuccas),
- all species of the family Cactaceae (e.g., chollas, cactuses, and prickly pears), and
- all species of the family Fouquieriaceae (e.g., ocotillo and candlewood).

3.5.3.2.9 California Code of Regulations (Title 14, Sections 251.1, 670.2, and 670.5)

Title 14 Cal. Code Regs. Section 251.1 restricts the harassment of non-game birds and mammals. Harassment is defined as an intentional act that disrupts an animal's normal behavior patterns, which includes, but is not limited to breeding, feeding, or sheltering. Sections 670.2 and 670.5 list animals designated as "threatened" or "endangered" in California. SSC is a category conferred by the CDFW on species that are indicators of regional habitat changes or that are considered potential future protected species. SSCs do not have any special legal status, but this category is intended as a management tool to take these species into special consideration when decisions are made concerning the future of any owned parcel (Cal. Code Regs. 2025).

3.5.3.2.10 Natural Community Conservation Planning Act (California Fish and Game Code Sections 2800-2835)

Section 2800 et seq. of the California Fish and Game Code recognizes the need for broader conservation planning efforts within California to allow for the protection and conservation of natural resources within the state, while also allowing for continued growth and development. The Natural Community Conservation Planning Act provides a voluntary planning opportunity for private interests, landowners, and public agencies to coordinate with the CDFW and plan for conservation of specific areas based on multi-species and multi-habitat planning, ensure appropriate mitigation that is proportional to the impacts to fish and wildlife for potential development impacts within the planning area, and provide a framework for development projects to avoid, minimize, and compensate for project impacts on wildlife and habitats. The Natural Community Conservation Planning Act also allows the entities proposing the plan to receive take coverage from the CDFW for species as covered species in the approved NCCP. Fully protected species may be included as covered species. All NCCPs are approved by the CDFW through an Implementation Agreement with the entities that authorize the entity to manage and implement the plan and allows for incidental take of covered species (CDFW 2025b).

3.5.3.3 Local

3.5.3.3.1 County of San Diego

San Diego County General Plan

The Wildlife Corridors and Habitat Linkages section of the San Diego County General Plan Conservation and Open Space element contains goals and policies for the protection and management of biological resources in San Diego County (County) (County of San Diego 2011a). The following policies are relevant to the Proposed Project:

- **Policy COS-1.2: Minimize Impacts.** Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.

- **Policy COS-1.9: Invasive Species.** Require new development adjacent to biological preserves to use non-invasive plants in landscaping. Encourage the removal of invasive plants within preserves.

- **Policy COS-2.1: Protection, Restoration and Enhancement.** Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories.

- **Policy COS-2.2: Habitat Protection through Site Design.** Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

- **Policy COS-3.1: Wetland Protection.** Require development to preserve existing natural wetland areas and associated transitional riparian and upland buffers and retain opportunities for enhancement.

- **Policy COS-3.2: Minimize Impacts of Development.** Require development projects to:

  - Mitigate any unavoidable losses of wetlands, including its habitat functions and values; and

  - Protect wetlands, including vernal pools, from a variety of discharges and activities, such as dredging or adding fill material, exposure to pollutants such as nutrients, hydromodification, land and vegetation clearing, and the introduction of invasive species.

The Water Resources section of the San Diego County General Plan Conservation and Open Space element contains goals and policies for the protection, management, and long-term viability of water resources in the County (County of San Diego 2011a). The following policies are relevant to the Proposed Project:

- **Policy COS-5.4: Invasive Species.** Encourage the removal of invasive species to restore natural drainage systems, habitats, and natural hydrologic regimes of watercourses.

The Visual Resources section of the San Diego County General Plan Conservation and Open Space element contains goals and policies for the protection and management of the natural environment and built environment in the County (County of San Diego 2011a): The following policies are relevant to the Proposed Project:

- **Policy COS-11.7: Underground Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

The Air Quality, Climate Change, and Energy section of the San Diego County General Plan Conservation and Open Space element contains goals and policies for the protection and management of the natural environment and built environment in the County (County of San Diego 2011a): The following policies are relevant to the Proposed Project:

- **Policy COS-14.11: Native Vegetation.** Require development to minimize the vegetation management of native vegetation while ensuring sufficient clearing is provided for fire control.

Alpine Community Plan

The San Diego County General Plan includes the Alpine Community Plan originally adopted by the Board of Supervisors on December 31, 1979, and last amended in 2016. This community plan provides more specific guidelines for land use decisions within the unincorporated community of Alpine to ensure that future growth and development align with the specific community needs, as well as the goals and policies of the San Diego County General Plan. The County is currently working on a comprehensive update to the 1979 Alpine Community Plan and released the updated Alpine Draft Community Plan on November 4, 2020, for public review and comment. The Alpine Draft Community Plan was reviewed for the relevant policies related to biological resources. The Conservation and Open Space Element includes goals and policies for the protection and management of open space and recreational resources for their local and regional benefits (County of San Diego 2020). The following goals and policies are relevant to the Proposed Project:

- **Goal COS-3:** Create an open space system that provides connectivity for the community and wildlife, and provides buffers between open space and developments.
- **Policy COS-3.1:** Encourage preservation/conservation of open space corridors that connect the community of Alpine to the following:

    - Cleveland National Forest,
    - El Capitan and Loveland Reservoirs, and
    - Sweetwater River Basin.

Crest/Dehesa/Granite Hills/Harbison Canyon Community Plan

The San Diego County General Plan includes the Crest/Dehesa/Granite Hills/Harbison Canyon Community Plan which was adopted by the Board of Supervisors on August 3, 2011. This community plan provides more specific guidelines for land use decisions within the

unincorporated Crest, Dehesa, Granite Hills, and Harbison Canyon geographic areas of San Diego County to ensure that future growth and development in these communities aligns with the specific community needs, as well as the goals and policies of the San Diego County General Plan. The Crest/Dehesa/Granite Hills/Harbison Canyon Community Plan was reviewed for the relevant policies related to biological resources in the Conservation and Open Space element of the plan (County of San Diego 2011b).

The Plant and Animal Habitats and Wildlife Corridors section of the Conservation and Open Space Element contains goals and policies to protect and manage biological resources in the community plan area. The following goals and policies are relevant to the Proposed Project:

- **Goal COS-1.1:** Retain the natural landscape within the Subregion through the preservation and planned management of environmental resources that prevent wasteful exploitation or degradation of those resources. (combined Formerly General Conservation and Natural Habitat Protection Goals).

- **Policy COS-1.1.1:** Preserve the integrity and continued function of natural habitat within the Subregion by maximizing the amount of areas left in natural coastal sage scrub cover to ensure its long term value as a vegetation community and wildlife habitat. (Formerly Natural Habitat Protection Policy 1).

- **Policy COS-1.1.2:** Minimize adverse impacts to areas identified as containing rare and endangered plants within the Subregion. (Formerly Natural Habitat Protection Policy 2).

- **Policy COS-1.1.3:** Require development to provide buffers around areas of sensitive habitats, and encourage use of native and/or hybrid landscaping plants near sensitive plant species. (Formerly Natural Habitat Protection Policy 3).

The Surface, Groundwater, and Watersheds section of the Conservation and Open Space Element contains goals and policies to protect and manage water resources in the community plan area. The following goals and policies are relevant to the Proposed Project:

- **Goal COS-1.2:** Protection of surface water bodies in the Subregion to maintain high quality water resources.

- **Policy COS-1.2.1:** Require development to set back from the streambeds and their banks, and to protect water courses and associated sensitive resources in their natural, undisturbed forms. (Formerly General Conservation Policy 1).

- **Policy COS-1.2.2:** Require development on slopes to incorporate measures, such as split level pads in their design, to minimize the need for pad grading to protect downslope areas from erosion and to disperse runoff to adequately allow for filtration and/or infiltrations. (Formerly Soils Policy 2).

- **Policy COS-1.2.3:** Require development to maximize erosion and siltation control and slope stabilization, whenever grading is required. (Formerly Soils Policy 5).

- **Policy COS-1.2.4:** Require development to minimize and strategically align, road crossings of watercourses. (Formerly Floodplains and Watercourses Policy 2).

This community plan also identifies the Puetz Valley/Flinn Springs/Oak Riparian Woodland/Harbison Canyon, McGinty Mountain, Sequan Creek, Japatul Road, Loveland Drainage, Loveland Reservoir, and North Fork of the Sweetwater River resources conservation areas that the Proposed Project Area would cross. For these areas, the County and other public agencies are directed to give careful consideration and special environmental analysis to projects that they are considering for approval in these resource conservation areas to ensure resources are conserved and that projects are consistent with the overlay designation.

County of San Diego Biological Mitigation Ordinance

The County's Biological Mitigation Ordinance was established to prevent degradation and loss of biological resources within San Diego County by setting mitigation standards that are applied to discretionary permits approved by the County. This ordinance enables the County to ensure it is meeting the conservation goals of the County's MSCP Subarea Plan and also provides opportunities for landowners to make reasonable use of their land in a manner consistent with CEQA, other laws, and the avoidance and mitigation requirements in the ordinance (County of San Diego 2010).

3.5.3.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan contains the following policies that are relevant to biological resources (City of El Cajon 2000):

- **Policy 8-2.1:** The retention of the unique natural features of a development site such as rock outcroppings, native vegetation and trees shall be encouraged.

- **Policy 8-2.3:** All graded slopes shall be adequately planted for erosion control.

- **Policy 8-7.1:** Appropriate measures shall be required for the protection of any rare or endangered animal or plant species located in an area to be developed. Methods of compensation to the property owners should be explored to assist in the preservation of such species.

- **Policy 8-7.2:** The City shall consider imaginative and effective measures to preserve unique species and habitats, including, but not limited to, relocation of the species, creation of open space preserves and transfer of development rights.

- **Policy 8-8.2:** The City shall upgrade and improve its landscaping policy which encourages use of vegetation which has low water requirements.

- **Policy 8-10.3:** The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.

- **Policy 8-10.6:** The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

3.5.3.3.3 Habitat Conservation and Management Plans

San Diego County Water Authority Subregional Natural Community Conservation Plan/Habitat Conservation Plan

Prepared in 2010, the San Diego County Water Authority (SDCWA) Subregional NCCP/HCP includes incidental take coverage, pursuant to Section 2800 et seq of the California Fish and Game Code (CDFW 2025b) and Section 10(a) of the FESA, for 63 species (i.e., 26 plant species and 37 wildlife species) resulting from SDCWA's construction and O&M activities. The NCCP/HCP Plan area is composed of approximately 992,000 acres in western San Diego and southwestern Riverside counties (SDCWA 2010). The western half of the proposed 230 kV transmission line would be located within the NCCP/HCP area.

San Diego Multiple Species Conservation Program Plan

Approved in 1998, the San Diego MSCP Plan is a joint NCCP/HCP that includes coverage for 85 plant and wildlife species within the southwestern portion of San Diego County. The San Diego MSCP Plan includes cities within San Diego County, as well as unincorporated communities. The MSCP Plan covers approximately 900 square miles of southwestern San Diego County and the plan area is bordered by Mexico on the south, CNF-managed national forest lands on the eastern boundary, Pacific Ocean to the west, and the San Dieguito River Valley on the north, but it does not include military lands. The MSCP, along with the San Diego Association of Governments Multiple Species Habitat Conservation Program and the County's Multiple Habitat Conservation and Open Space Program in the eastern portion of San Diego County, create an interconnected habitat Preserve system throughout the approximately 4,200 square miles of San Diego County. Each jurisdiction under the San Diego MSCP Plan area includes their own subarea plan (County of San Diego 1997) that is used to implement their portion of the MSCP Plan.

The MSCP Plan and the subarea plans serve as multiple species HCP/NCCPs for the plan area and covered activities. The MSCP Plan is intended to protect biodiversity, conserve native vegetation communities and associated species, and allows for development flexibility through the regional Preserve system to meet public and private mitigation needs. Each approved subarea plan and Implementing Agreement allow the local jurisdiction to receive permits and/or manage authorizations for take of covered species pursuant to the approved plan. Those entities authorized for take also must ensure that the land uses within Preserve areas are compatible with the biological objectives of the MSCP Plan and each subarea plan. Each subarea plan specifies the measures required to achieve consistency with the MSCP Plan and the conservation targets. As detailed in the following subsections, the Proposed Project Area would traverse or be located within 5 miles of subarea plans for the cities of El Cajon, La Mesa, Santee, San Diego, and unincorporated communities within San Diego County (i.e., east and south San Diego County) (City of San Diego 1998).

City of El Cajon Multiple Species Conservation Program Subarea Plan

The City of El Cajon is in the process of preparing the El Cajon MSCP Subarea Plan (El Cajon Subarea Plan). The El Cajon Subarea Plan area includes the City of El Cajon and the surrounding sphere of influence (City of San Diego 1998). However, this plan is still pending approval and has not been finalized. This plan was last on an agenda for discussion between the City of El Cajon and the USFWS on May 20, 1999 (USFWS 2002). The proposed Hospital Staging Yard would be located within the City of El Cajon and the site is likely to be included in the El Cajon Subarea Plan once developed.

City of La Mesa Multiple Species Conservation Program Subarea Plan

The City of La Mesa MSCP Subarea Plan (La Mesa Subarea Plan) was adopted in 1999 with the primary goal to protect coastal sage scrub habitat occurring within the City of La Mesa, including protection of approximately 208 acres within the city. This plan covers three plant species and five wildlife species that are present or may be present in the City of La Mesa. In addition, this La Mesa Subarea Plan adds approximately 55 acres of coastal sage scrub habitat to be preserved within the City of La Mesa and included in the Eastridge Specific Plan approved by the city in 1989. Most of the mitigation lands are planned to be maintained by private property owners by acquiring and dedicating land in perpetuity within the City of Poway's Preserve areas, or through the City of Poway's in-lieu fee program, or mitigated elsewhere within the boundaries of the overall MSCP. However, habitat within the City of La Mesa is not part of the identified core biological resource areas and habitat linkages in the MSCP (City of La Mesa 1998).

City of Santee Multiple Species Conservation Program Subarea Plan

The City of Santee is in the process of preparing the Santee MSCP Subarea Plan (Santee Subarea Plan). The Environmental Impact Report and the Draft Santee Subarea Plan were released for public review in August 2025. The Santee Subarea Plan included covered activities for planned and future development, O&M of the City of Santee infrastructure and facilities, and the establishment of a Preserve system and the management and monitoring activities for the Preserves. The Santee Subarea Plan tentatively includes a Preserve system with approximately 2,263 acres of Preserve area. The Santee Subarea Plan is intended to cover avoidance, minimization, and mitigation for the take of 20 special-status species covered under the plan, including eight plants, five invertebrates, three reptiles and amphibians, and four birds. The Santee Subarea Plan also includes approximately 80.4 acres of planned land acquisition within the Hermes Copper Butterfly Offsite Conservation Area near the unincorporated community of Alpine, and approximately 109 acres of land acquisition and restoration within the Quino Checkerspot Butterfly Offsite Conservation Area (City of Santee 2025 and CDFW 2025c). Although the Santee Subarea Plan is still in progress, the proposed 230 kV western UG segment would be located within 5 miles of the Santee Subarea Plan, but no Proposed Project components would occur within the plan area.

City of San Diego Species Conservation Program Subarea Plan

The City of San Diego MSCP Subarea Plan (San Diego Subarea Plan) was adopted in 1997 and incorporated into the MSCP. The primary goals of the San Diego Subarea Plan are to protect covered species, including California gnatcatcher and other unique species to the City of San Diego; enhance biodiversity; and to conserve specific areas in perpetuity to protect special-status

and sensitive species and their habitats within the City of San Diego. The San Diego Subarea Plan is the basis for the implementation of the City of San Diego's portion of the MSCP Preserve and highlights areas where limited development may occur. The San Diego Subarea Plan covers approximately 206,124 acres of the MSCP area and is considered an urban preserve that connects to many large habitat areas. The City of San Diego's multi-habitat planning area (MHPA) and Preserve system is approximately 56,831acres, which includes lands within the City of San Diego jurisdiction, City of San Diego-owned lands, and unincorporated areas near San Vicente Reservoir, Otay Lakes, and Marron Valley. Approximately 90 percent of the MHPA is proposed for conservation and includes areas that will be preserved in perpetuity. This San Diego Subarea Plan includes the same covered species included in the MSCP and contains policies related to construction, siting, and design of utility projects to avoid and minimize impacts to the habitat of MSCP covered species and wetlands, and also requires mitigation of unavoidable impacts. The San Diego Subarea Plan is divided into different areas that have specific guidelines for the MHPA and covered species that need to be followed for projects to receive take authorization under the plan. The Eastern Area includes 10 covered plant species and 10 covered wildlife species (County of San Diego 1997). The eastern boundary of the Eastern Area of the San Diego Subarea Plan near the border of the City of San Diego and the City of El Cajon occurs within 5 miles of the Proposed Project, but no Proposed Project components occur within the San Diego Subarea Plan area.

County of San Diego Subarea Plans

The County of San Diego Subarea Plan was adopted in 1997 with the primary goal to acquire or permanently protect 98,379 acres in the unincorporated portions of San Diego County. Land uses are generally limited to those compatible with the need to protect natural resources, such as open space easements.

South County Subarea Plan

The South County Subarea Plan within the County of San Diego Subarea Plan includes approximately 82,767 acres within the southwest portion of unincorporated San Diego County, including approximately 48,240 acres of open space. The Proposed Preserve system includes much of the bottomlands in the valleys surrounding the Otay River and Sweetwater River above the Sweetwater Reservoir on Highway 94, as well as areas already in conservation or planned for conservation. The South County Subarea Plan includes lands owned or pledged for conservation purposes by organizations (e.g., The Nature Conservancy, and The Environmental Trust) and governmental agencies (e.g., Sweetwater Authority, Bureau of Land Management, USFWS, and CDFW) as part of the Preserve system. Projects covered by the South County Subarea Plan primarily include residential uses and associated facilities (County of San Diego 1997). The western half of the proposed 230 kV transmission line would be located within the South County Subarea Plan.

East County Subarea Plan

The East County Subarea Plan within the County of San Diego Subarea Plan includes coverage for approximately 1.55 million acres in San Diego County and is bounded on the west by CNF, to the north by Riverside County, to the east by Imperial County, and to the south by Mexico. The East County Subarea Plan is currently being developed and includes an initial list of covered species, conservation areas, and habitat linkages. The County has jurisdiction over approximately

25 percent, or 382,000 acres, of the planning area, including private parcels and County-owned land in unincorporated San Diego County. Public agencies have jurisdiction over the remaining approximately 75 percent of the planning area. A planning agreement between the County, CDFW, and USFWS was published in March 2021 regarding the North County Subarea Plan and East County Subarea Plan. The eastern half of the proposed 230 kV transmission line would be located within the East County Subarea Plan planning area (County of San Diego 2021).

San Diego Gas & Electric Company 1995 Subregional Natural Community Conservation Plan/Habitat Conservation Plan

In the mid-1990s, SDG&E developed its Subregional NCCP/HCP (Subregional Plan) with the USFWS and the CDFW pursuant to the FESA, Natural Community Conservation Planning Act, and California Fish and Game Code Section 2800 et seq (CDFW 2025b). The SDG&E Subregional Plan was designed to avoid, minimize, and mitigate impacts to numerous covered species (i.e., species covered by the Subregional Plan) and their habitat while allowing SDG&E to undertake covered activities (i.e., those needed to install, maintain, operate, repair, and expand its existing gas and electric system), and the Subregional Plan expires in 2050. In 1995, the USFWS determined that the SDG&E Subregional Plan met the permit issuance criteria of FESA Section 10(a)(2)(B) and issued SDG&E an ITP that authorized a total of up to 400 acres of habitat modification as a result of SDG&E's covered activities before requiring an amendment to the SDG&E Subregional Plan. Authorizations under this 30-year plan have now expired and have been replaced by the HCP Amendment approved by the USFWS in 2023, which is discussed in the following section. The NCCP portion of the SDG&E Subregional Plan is still undergoing an amendment process with the CDFW.

San Diego Gas & Electric Company Habitat Conservation Plan Amendment

Published in 2023, the SDG&E HCP Amendment is an amendment to SDG&E's 1995 Subregional Plan, which supports the continuation of covered activities under SDG&E's FESA ITP issued by the USFWS in December 1995. The ITP authorized the incidental take of 110 species in San Diego County and portions of Orange and Riverside counties. The HCP Amendment maintains and bolsters the Operational Protocols outlined in the 1995 SDG&E Subregional Plan. The HCP Amendment also provides the following:

- expands the SDG&E Subregional Plan boundary to include the entire 2,815,930-acre SDG&E service area;
- includes authorization for an additional 400 acres of permanent impacts, 210 acres of temporary impacts, and 210 acres of wildfire fuels management impacts to habitat;
- updates the covered species list based on coordination with the USFWS; and
- adds new species-specific protections and a process for providing species-specific compensatory mitigation as appropriate.

In 2023, the USFWS determined that the HCP Amendment met the permit issuance criteria of Section 10(a)(2)(B) of the FESA and issued SDG&E an amended ITP that authorized incidental take of certain federally listed species, provided that SDG&E implements and complies with the HCP Amendment before requiring further amendment of the SDG&E Subregional Plan.

San Diego Gas & Electric Company Subregional Natural Community Conservation Plan Amendment for Wildfire Safety Activities

Published in 2022, the SDG&E Subregional NCCP Amendment for Wildfire Safety Activities is an amendment to SDG&E's Subregional Plan and authorizes SDG&E to conduct critical wildfire safety activities (e.g., pole replacement and inspections, vegetation management in High Fire Threat Districts, and wildfire fuels management) on and around existing SDG&E infrastructure to reduce wildfire risk and support grid resilience. This amendment was necessary due to increased wildfire safety activities that were beyond the frequency and acreages originally anticipated in the SDG&E Subregional Plan. The increased frequency and larger activity areas resulted in greater habitat impacts during the wildfire safety activities. In response, SDG&E worked with the CDFW to add the first amendment to the SDG&E Subregional NCCP while SDG&E and the CDFW work on the long-term amendment to be consistent with the HCP Amendment recently approved by the USFWS. The long-term amendment would also include wildfire safety activities for the next 30 years along with other covered activities. The long-term amendment would increase the amount of habitat that SDG&E is authorized to impact under the SDG&E Subregional Plan and would result in improved conservation for covered species. The SDG&E Subregional NCCP Amendment required compliance with the Subregional Plan's avoidance, minimization, and mitigation requirements and added 20 acres of impacts exclusively for wildfire safety activities before requiring an additional amendment (CDFW 2022).

San Diego Gas & Electric Company Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly

On August 20, 2007, the USFWS issued a permit for the Low-Effect HCP for Quino Checkerspot Butterfly (Quino LEHCP) to SDG&E for the issuance of an ITP under Section 10(a)(l)(b) of the FESA for the federally endangered Quino checkerspot butterfly (SDG&E 2007). The purpose of the Quino LEHCP is to minimize and mitigate the effects of SDG&E's covered activities (i.e., new facilities and O&M) on the Quino checkerspot butterfly over the 50-year term of the USFWS ITP within the same plan area as the SDG&E Subregional Plan. The Quino LEHCP area includes San Diego County west of the desert, the portion of Orange County within the existing SDG&E service territory, and the SDG&E Moreno Compressor Station in Riverside County. All Proposed Project components would occur within the Quino LEHCP area.

Similar to measures outlined in the HCP Amendment for invertebrate species, the Quino LEHCP includes operational protocols, including pre-activity surveys and mitigation requirements to minimize potential impacts from SDG&E covered activities. Because the Quino checkerspot butterfly is covered independently under the Quino LEHCP, it is not included as a covered species in the previously discussed HCP Amendment. The Quino LEHCP permitted up to 33 acres of impacts to Quino checkerspot butterfly unoccupied habitat, occupied habitat, and critical habitat. The Quino LEHCP qualifies as a "low-effect" HCP based on the USFWS Habitat Conservation Planning Handbook because the HCP involves "(1) minor or negligible effects on federally-listed, proposed or candidate species and their habitats … and (2) minor or negligible effects on other environmental values or resources. 'Low-Effect' incidental take permits are those permits that, despite their authorization of some small level of incidental take, individually or cumulatively have a minor or negligible effect on the species covered" (USFWS 1998).

Southern California National Forests Land Management Plan – Part 2 Cleveland National Forest Strategy

Part 2 of the Southern California National Forests Land Management Plan (LMP) includes the CNF LMP and addresses land use designations and the suitable uses within each designation (USFS 2005). The Proposed Project Area would occur within the Developed Areas Interface and Back Country Motorized Use Restricted land uses zones and within the Sweetwater Place geographical unit of the LMP. The desired condition for the Sweetwater Place is to maintain its natural, undeveloped landscape in an otherwise highly developed rural setting. The proposed 230 kV OH segment would occur within the CNF starting west of Pole 45 and include all portions of the segment up to and including Poles 57-A and 57-B, as depicted on Map 9 through Map 11 in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area. Additionally, a short distance of the proposed 230 kV eastern UG segment would occur within the CNF before it transitions to land owned by SDG&E and connects to the existing Suncrest Substation.

Appendix B. Program Strategies describes detailed program strategies that the USFWS may implement within the CNF to achieve desired conditions and goals. Applicable strategies relevant to biological resources within the survey area on CNF-managed lands are as follows:

- **Strategy WL-1: Threatened, Endangered, Proposed, Candidate, and Sensitive Species Management.** Manage habitat to move listed species toward recovery and de-listing. Prevent listing of proposed and sensitive species.

- **Strategy WL-2: Management of Species of Concern.** Maintain and improve habitat for fish, wildlife, and plants, including those with the following designations: game species, harvest species, management indicator species, and watch list species.

- **Strategy IS-1: Invasive Species Prevention and Control.** Prevent the introduction of new invaders, conduct early treatment of new infestations, and contain and control established infestations.

- **Strategy WAT-1: Watershed Function.** Protect, maintain and restore the natural watershed functions including slope processes, surface water and groundwater flow and retention, and riparian area sustainability:

    - Restore, maintain and improve watershed conditions. Assure that approved and funded rehabilitation and emergency watershed treatments are implemented in an effective and timely manner.

    - Maintain or restore soil properties and productivity to ensure ecosystem health (soil microbiota and vegetation growth), soil hydrologic function, and biological buffering capacity.

    - Manage Riparian Conservation Areas (RCA) to maintain or improve conditions for riparian dependent resources. RCAs include aquatic and terrestrial ecosystems and lands adjacent to perennial, intermittent, and ephemeral streams, as well as around meadows, lakes, reservoirs, ponds, wetlands, vernal pools, seeps, springs and other

water bodies. Riparian dependent resources are those natural resources that owe their existence to the area, such as fish, amphibians, reptiles, fairy shrimp, aquatic invertebrates, plants, birds, mammals, soil and water quality.

- Maintain natural stream channel conductivity, connectivity and function.

- Assess and manage geologic resources and hazards to integrate earth science principles and relationships into ecosystem management, reduce risks to people and resources, and to interpret and protect unique values.

- Identify, prioritize based on risk, and mitigate the impacts of abandoned and inactive landfills on water, soil and other resources. Stabilize and reclaim where necessary, abandoned and inactive landfills to maintain proper watershed function, public safety and resource benefit.

- Inventory, analyze and prioritize abandoned mines to identify chemical and physical hazards, historic significance, and biological resources prior to reclamation. Mitigate safety hazards and adverse environmental impacts, conduct reclamation as needed, and assure that water quality standards are met.

- Maintain watershed integrity by replacing or disposing of displaced soil and rock debris in approved placement sites.

- **Strategy Link 1: Habitat Linkage Planning.** Identify the linkages to surrounding habitat reserves and other natural areas for maintaining biodiversity. Collaborate with local government, developers, and other entities to complement adjacent federal and non-federal land use zones and associated design criteria.

Sweetwater Authority Natural Community Conservation Plan/Habitat Conservation Plan

The Sweetwater Authority, a joint powers authority between the South Bay Irrigation District and the City of National City, received a grant from the USFWS in 2022 to begin preparing a draft NCCP/HCP. This NCCP/HCP would cover the Sweetwater Authority O&M activities and the protection and management of natural resources on Sweetwater Authority lands (Sweetwater Authority 2022). This plan is currently being prepared, and the planning area is likely to cover the areas that the Sweetwater Authority owns from Loveland Reservoir down to San Diego Bay (USFWS 2024a). The proposed 230 kV OH segment from Poles 21 to 35, as depicted on Map 6 through Map 8 in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area, would be located within Sweetwater Authority lands that are likely to be part of the planned NCCP/HCP.

3.5.4 Impact Analysis and Mitigation Measures

3.5.4.1 Analysis Methodology

Potential impacts to biological resources were determined based on information summarized in Section 3.5.2 Environmental Setting and review of the following technical reports:

- Biological Resources Technical Report (Insignia 2026a),

- Aquatic Resources Delineation Report (Insignia 2026b), and
- Botanical Resources Report (Insignia 2026c).

3.5.4.2 Applicant-Proposed Measures and Best Management Practices

Past SDG&E projects (e.g., the Tie Line 649 Wood-to-Steel Replacement Project), permits, and existing SDG&E programmatic permits were considered in developing applicant-proposed measures (APMs) to avoid and reduce impacts to biological resources. The following APMs would be implemented for the Proposed Project to avoid, reduce, and minimize impacts to biological resources:

- **APM BIO-01: Conduct Biological Surveys.** Biological field surveys (i.e., surveys to identify vegetation communities and land cover, aquatic features, and potential habitat for special-status plant and wildlife species) will be performed for any portion of the Project area not yet surveyed (e.g., areas that did not have landowner access, new or modified staging areas, or stringing sites) if feasible. Sensitive biological resources identified during surveys will be subject to avoidance and/or minimization in accordance with the applicable Project APMs. To prevent the potential for an inadvertent impact to sensitive resources, a qualified biologist will establish exclusion zones demarked as Environmentally Sensitive Areas (ESAs). When appropriate, a qualified biologist will attend tailboard meetings to review ESAs to be protected with construction crews on a site-specific basis.

- **APM BIO-02: Develop and Implement a Habitat Restoration Plan.** SDG&E will develop and implement a Habitat Restoration Plan (HRP) for the restoration of temporary construction areas as practicable after work is complete. Restoration activities will be conducted in accordance with negotiated agreements with landowners and in compliance with applicable permits.

- **APM BIO-03: Biological Monitoring.** A qualified biologist will monitor construction activities within suitable special-status species habitat that may impact sensitive biological resources as feasible. The qualified biologist will be a person who has the educational background, training, and work experience (i.e., handling experience or permits) required to perform a specific biological task. The monitor will have the authority to stop work activities upon the discovery of sensitive plant or wildlife species that could be adversely impacted by construction.

- **APM BIO-04: Delineation of Work Areas.** All work areas within the Project area will be clearly delineated prior to construction commencing with fencing, staking, or flags. Construction activities will be restricted to delineated work areas, and all delineation will be maintained in working order until completion of construction.

- **APM BIO-05: Training Program.** All SDG&E personnel and contractors working within the Project area will participate in SDG&E's Worker Environmental Awareness Training (WEAP). The WEAP will include an overview of roles and responsibilities, a summary of Project requirements, identification of sensitive resources, and contact information for key Project personnel.

- **APM BIO-06: No Harm to Wildlife.** No wildlife, including rattlesnakes, will be intentionally harmed, except to protect life and limb. Feeding wildlife will not be allowed. In addition, plants or wildlife will not be collected as pets or for any other reason.

- **APM BIO-07: Vehicular Conduct.** Vehicles will be kept on access roads and within approved work limits. A speed limit of 15 miles per hour (mph) will be observed on dirt access roads to allow wildlife to disperse. A speed limit of 5 mph will be observed within staging yards. Vehicles will be turned around in established or designated areas only. Parking or driving underneath oak trees will not be allowed, except in established traffic areas, to protect root structures.

- **APM BIO-08**: **Trash Management.** Project personnel will not deposit or leave any food or waste on the ROW or adjacent property. In addition, all trash receptacles used on the Project will have securely closed lids.

- **APM BIO-09: Wildfire Prevention.** Wildfires will be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters or vehicle parts can ignite dry vegetation. Construction vehicles and equipment will carry fire tools (e.g., water backpack pumps, shovels, Pulaskis, and/or fire extinguishers) while operating in the field in accordance with the most current SDG&E and/or agency fire prevention standards and practices.

- **APM BIO-10: Equipment Placement.** All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other such activities will occur in designated areas at least 100 feet from of waters of the U.S. or waters of the State to the extent practicable. These designated areas will be operated in a manner to prevent spills and any runoff from entering aquatic resources through the use of materials (e.g., drip pans) that prevent fuel, oil, or coolant from contacting soils. Contractor equipment will be checked for leaks prior to operation and repaired as necessary. If equipment repair is necessary at any of the other approved work areas, all trucks, tools, and equipment will be kept on existing access roads, over containment or on cleared areas to the extent practicable.

- **APM BIO-11: Off-Road Hiking.** Hiking off roads or paths for survey data collection will be allowed year-round if it does not impact sensitive resources.

- **APM BIO-12: Project Lighting.** If night work is necessary, night lighting will be of the lowest illumination necessary for operational safety, selectively placed, shielded, and directed away from natural habitats as needed. Any permanent lighting adjacent to all on- or off-site habitat will be directed away from natural habitats and/or shielded so as not to illuminate those habitats.

- **APM BIO-13: Invasive Species Prevention.** Field crews will coordinate with a qualified biologist to implement preventative invasive species control best management practices (BMPs) found in Prevention BMPs for Transportation and Utility Corridors California Invasive Plant Council (Cal-IPC) (Cal-IPC 2012).

- **APM BIO-14: Tree Trimming.** A qualified biologist will perform a pre-construction survey when tree trimming is planned in environmentally sensitive areas. Tree trimming will occur in accordance with proper pruning methods per arborist and utility standards.

- **APM BIO-15: Trapped Animal Prevention.** Supplies and equipment where wildlife could hide (e.g., culverts and pole holes) will be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected or from which animals cannot be removed will be capped or otherwise covered at the end of each workday. Old piping or other supplies that have been left open will not be capped until inspected, and any species found within will be allowed to escape on their own or moved by a qualified biologist. All excavated holes/trenches that are not filled at the end of a workday will be covered, or a wildlife escape ramp will be installed to prevent the inadvertent entrapment of wildlife species when necessary. If an animal is found entrapped in supplies or equipment (e.g., a pipe section), the supplies or equipment will be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by a qualified biologist. All steep-walled trenches or excavations used during construction will be inspected twice daily (i.e., in the early morning and evening) to protect against wildlife entrapment. If wildlife are located in the trench or excavation, the qualified biologist will be called immediately to remove them if they cannot escape unimpeded.

- **APM BIO-16: Special-Status Species Avoidance.** Dens and burrows of special-status species will be flagged and avoided, to the extent practicable or approval obtained through consultation with resource agencies, as applicable.

- **APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines.** The proposed 230 kV transmission line and modifications to the existing Suncrest Substation will be designed to adhere to the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006, 2012) or other industry leading modern technology recommended by resource agencies or APLIC. SDG&E will also develop a Nesting Bird Management Plan (NBMP) that adheres to these guidelines and provides provisions to minimize collision and electrocution risk to avian species during Project activities.

- **APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code.** SDG&E will prepare a NBMP to avoid and minimize impacts to birds and their nests protected under the MBTA and California Fish and Game Code. The NBMP plan will describe nesting bird survey triggers, requirements (initial and refresh intervals) and the process to avoid impacts to nesting birds discovered during construction. The NBMP will include protocols for construction around active resources and communication with applicable agencies.

3.5.4.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For biological resources, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS?
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

3.5.4.4 Additional CEQA Impact Questions

Pursuant to the California Public Utilities Commission (CPUC)'s Guidelines for Energy Project Applications Requiring CEQA Compliance, the following additional CEQA Impact Question is required for biological resources. Would the Proposed Project:

- Create a substantial collision or electrocution risk for birds or bats?

3.5.4.5 Impact Analysis

A summary of the applicable APMs and prescribed mitigation measures (MMs) for each CEQA Impact Question and impact type (i.e., direct and indirect) is detailed in Attachment 3.5-L: Biological Resource Impacts and Measures Comparison.

3.5.4.5.1 Impact BIO-01: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special-Status Plant Species with the Potential to Occur

All special-status plant species that were present or have a moderate to high potential to occur in the survey area are identified in Table 3.5-3: Impacts to Suitable Special-Status Plant Species Habitat within the Survey Area, along with their potential to occur within the survey area, habitat requirements, and the total area of temporary and permanent impacts to their suitable habitat.

Special-Status Plant Species Present

Special-status plant species that were detected during botanical field surveys occurring within Proposed Project work areas were included in this impact analysis. Anticipated impacts to these species are identified in Table 3.5-5: Impacts to Occupied Special-Status Plant Species Habitat within the Proposed Project Area. Of the eight species recorded during botanical field surveys, the Proposed Project is anticipated to impact five of those species (i.e., Engelmann oak, Munz's sage, Robinson's pepper grass, rush like bristleweed, and San Diego County viguiera). The Proposed Project is not anticipated to impact three species (i.e., delicate clarkia, Palmer's goldenbush, and San Diego sagewort).

Table 3.5-5: Impacts to Occupied Special-Status Plant Species Habitat within the Proposed Project Area

Species Name	Approximate Occupied Habitat Impacts (acres)	
	Temporary	Permanent
Engelmann oak	<0.01	<0.01
Munz's sage	0.12	0.09
Robinson's pepper grass	<0.01	<0.01
Rush like bristleweed	<0.01	<0.01
San Diego County viguiera	1.40	1.41

Construction

Less-than-Significant Impact with Mitigation. The Proposed Project would be located in a diverse set of vegetation communities that support special-status plant species. Most of the Proposed Project would utilize existing roads or helicopter construction and would consequently have reduced impacts to both suitable and occupied habitat for special-status plant species.

Direct impacts to special-status plants may include removal or trimming of plants in the footprint of work areas for trenches, poles, helicopter landing zones, or access roads; and trampling, trimming, or destruction of plants from the use of footpaths and work areas. Individuals of the plant species presented in Table 3.5-5: Impacts to Occupied Special-Status Plant Species Habitat within the Proposed Project Area are located within both temporary and permanent impact areas associated with construction of the proposed 230 kV OH segment and the proposed 230 kV western UG segment; as a result, direct impacts to those individuals are anticipated. Impacts to these species would generally be considered less than significant as the loss of individual plants within the impact areas would not cause potentially significant impacts to the populations of these species due to the abundance of adjacent suitable habitat and regional abundance of these species.

For example, Engelmann oak, Robinson's pepper grass, rush like bristleweed, and San Diego County viguiera are CRPR 4 species, which means these species have a limited distribution in California and do not currently meet the definition of endangered, rare, or threatened, but are monitored. The loss of individuals within the Proposed Project work areas would not cause potentially significant impacts to the populations of this species due to the small size of the impact areas or the abundance of these species within the survey area. Therefore, these impacts would be less than significant even without mitigation.

Munz's sage is a CRPR 2B.2 species and is fairly threatened in California, and a portion of the population within the survey area would be impacted by the Proposed Project. Because only a portion of this population would be impacted and the species would likely recolonize temporarily disturbed areas, these impacts would not be considered a potentially significant impact even without mitigation to Munz's sage.

Indirect impacts to special-status plant species during construction activities may include adverse effects associated with soil compaction, fugitive dust, fuel spills, erosion effects, an increase in ground surface disturbance, loss of areas that contain suitable microhabitat conditions for special-status plants, and introduction of invasive[11] plant species. Soil compaction may prevent seeds from germinating, resulting in a decline in population size. Additionally, soil compaction may cause erosion to increase. Increased erosion may bury seedlings and adversely affect plant growth, leading to a decline in special-status plant species' population size. Fugitive dust generated from ground-disturbing activities could coat the leaves of plants, thereby reducing photosynthesis and the plants' ability to grow. Potential fuel spills and increased ground disturbance may result in decreased habitat quality for native species. Increased habitat fragmentation and edge effects may also result in indirect effects. Invasive plant species could invade suitable habitat from the edges of Proposed Project work areas, which could result in increased competition among plants. If invasive plant species proliferate, this may result in an increased risk of wildfire, which could adversely affect special-status plants. Microhabitat conditions may be altered from habitat fragmentation and increased edges within habitat resulting in a reduction in habitat quality. Effects resulting from indirect impacts would be considered a potentially significant impact.

[11] The term "invasive" in the impact analysis is used to generally refer to non-native plant species that spread aggressively and outcompete native plant species.

As discussed in Section 3.11 Hydrology and Water Quality, because ground disturbance associated with the Proposed Project would exceed 1 acre, SDG&E would be required to obtain NPDES coverage under the Construction General Permit (Water Quality Order No. 2022-0057-DWQ).

Direct and indirect impacts would be avoided, minimized and/or mitigated by implementing a variety of APMs. Special-status plants would be clearly delineated, marked, and avoided by construction activities to the extent practicable in accordance with APM BIO-01. Implementation of this measure would lower the likelihood of impacts and the potential risk to special-status plants that may be found in the Proposed Project. Temporary impacts to suitable habitat would be restored in accordance with APM BIO-02. All construction activities would occur within delineated work areas in accordance with APM BIO-04, and all tree trimming would be conducted in accordance with APM BIO-14. Construction activities, including vegetation clearing, that may impact special-status plants would be monitored by a qualified biologist in accordance with APM BIO-03 or referred to the qualified biologist in accordance with APM BIO-05 to verify that impacts are avoided and minimized to the extent practicable. In addition, vehicles would be operated in accordance with APM BIO-07 to reduce potential for dust, and all vehicles would implement preventative invasive weed control BMPs, in accordance with APM BIO-13. Potential erosion resulting from soil compaction would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality.

All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10. Any spills of hazardous fluids (e.g., fuels, lubricants, solvents, herbicides, and paints) potentially affecting suitable habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality.

In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation. In accordance with APM BIO-09, the risk of wildfire would be reduced by following most current SDG&E and/or agency fire prevention standards and practices.

Proper dust control measures would also be implemented in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality, and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality, to reduce indirect impacts to special-status plant species. All construction equipment would also be operated in accordance with APM BIO-10 to verify that impacts to suitable habitat for native and special-status plants are reduced. With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to special-status plant species would be reduced to less than significant.

The CPUC has prescribed MM BIO-01 that requires supplemental botanical field surveys to occur within the portions of the survey area that were not previously accessed and surveyed. Because the entire survey area was not accessed during botanical field surveys, impacts to additional special-status plant species not previously documented could occur. If unanticipated occurrences of special-status plant species that are federally- or state-listed or a CRPR 1B or 2B species were to occur in a Proposed Project work area, then direct impacts could potentially be significant. Additionally, because rainfall quantities and timing were not optimal for current botanical field surveys, the results may not be representative of all special-status plant species that occur within the survey area, particularly annual and geophytic plant species. Supplemental botanical field surveys would be conducted in accordance with MM BIO-01 within all work areas or potential impact areas to identify any additional special-status plant species that could occur within the survey area. Survey results would inform the avoidance and minimization of impacts to any additional occurrences of special-status species, as applicable. Additionally, the CPUC has prescribed MM BIO-02, which requires mitigation for permanent impacts to special-status plant species which may be located in areas not accessed during prior field surveys. With the implementation of the APMs and MMs BIO-01 and BIO-02, the potential impacts to special-status plant species would be less than significant with mitigation.

Prescribed MMs include the following:

- **MM BIO-01. Conduct Supplemental Botanical Field Surveys.** Supplemental botanical field surveys would be conducted within all Proposed Project work areas with the potential to support special-status plant species (i.e., those areas within natural vegetation communities) that were not accessed during the 2025 botanical field survey. Areas consisting of developed and bare ground land cover or landscaped/ornamental habitat that do not provide suitable habitat for special-status plants are not proposed for botanical field surveys. Additional botanical field surveys may be conducted within previously surveyed Proposed Project work areas to the extent practicable and as determined by SDG&E.

- **MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants).** If avoidance of special-status plants is not feasible, SDG&E would implement measures to mitigate for impacts to special-status plants. Where temporary or permanent impacts to special-status plant species are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Operations and Maintenance

Less-than-Significant Impact. Preventative maintenance activities for the Proposed Project would be similar to those currently performed by SDG&E for existing facilities in the area. SDG&E would inspect the proposed 230 kV transmission line in a manner consistent with CPUC General Order (GO) 165 (CPUC 2025), which would require approximately one trip per year by crews composed of one to four people. Annual comprehensive checks and maintenance would be performed by SDG&E maintenance personnel or qualified contractors. Preventative maintenance

at the existing Suncrest Substation would involve quarterly inspections. A small, specialized team would be utilized to perform more extensive maintenance activities.

Vehicles used for O&M activities may result in the direct crushing of individual special-status plant species or disruption of photosynthesis from traffic-related dust. Trimming and use of footpaths may also result in the direct crushing of or damage to individual species-status plant species. Impacts to these species would be considered less than significant as the loss of individual plants resulting from O&M activities would not cause potentially significant impacts to the populations of these species. Loss of individual plants would also be unlikely to occur because O&M activities typically occur within areas of previous disturbance where special-status plant species would not occur or where those species would have already been subject to impacts during construction. Given the short duration and infrequent nature of these O&M activities, impacts would be less than significant.

Special-Status Wildlife Species

All special-status wildlife species that were present or have a moderate to high potential to occur in the survey area are detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. This table outlines each species' name, potential to occur within the Proposed Project Area, habitat requirements, and the total temporary and permanent impacts to the relative vegetation communities that serve as habitat for the species. A description of potential impacts by species or species category is provided in the following subsections.

Construction

Amphibian Species

Less-than-Significant Impact with Mitigation. Direct impacts to arroyo toad, large-blotched salamander, and western spadefoot (i.e., amphibians) may result from potential vehicle strikes during construction, destruction of upland aestivating/foraging sites during construction and vegetation-clearing activities, and entrapment in excavations. Dispersing individuals or individuals aestivating[12] in uplands would be at the greatest risk of direct impacts. Both permanent and temporary direct impacts to suitable upland habitat for amphibians are anticipated as presented in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. No direct impacts to suitable amphibian aquatic/breeding habitat are anticipated because Proposed Project work areas have been designed to avoid aquatic features that may function as aquatic/breeding habitat.

The suitable upland habitat subject to potential impacts varies greatly according to the species. Arroyo toad requires several unique habitat features to reproduce; for that reason, the distribution of this species within the survey area is limited. Conversely, western spadefoot and large-blotched salamander are more widely distributed within the survey area because these species are able to reproduce in a larger variety of aquatic habitats. Although permanent impacts to suitable upland habitat would occur, the impacts to individual amphibian species would be minimal because individuals would be able to occupy adjacent upland habitat. Additionally, impacts would be small in size and spread across a long linear area; as a result, the impacts to any given

[12] A state of animal dormancy, similar to hibernation, although taking place in the summer rather than the winter.

individual are unlikely to cover the individual's entire home range. Nonetheless, due to the permanent loss of suitable upland habitat from the Proposed Project, effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to amphibians during construction may include decreased suitability of habitat in the vicinity of the Proposed Project Area caused by increased noise from construction activities, fuel spills, vehicular traffic, and increased human activity. Noise from construction activities can affect wildlife in multiple ways, such as depressing breeding success by acoustical masking and interfering with foraging or breeding activities. However, amphibians are active during nighttime hours when construction would typically not occur. Spills of hazardous fluids (e.g., fuels, lubricants, solvents, herbicides, and paints) may alter the water chemistry and microhabitats of aquatic/breeding habitat, causing adverse effects to individuals and reduced habitat quality.

Additional indirect impacts may result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Upland habitat would be decreased within the Proposed Project Area and may result in increased competition for food and space. Invasive plant species could invade suitable habitat from the edges of Proposed Project work areas, which could reduce habitat quality. Effects resulting from indirect impacts would be considered a potentially significant impact.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. Suitable upland habitat for special-status amphibians would be clearly delineated, marked, and avoided by construction activities to the extent practicable in accordance with the implementation of APM BIO-01. Implementation of this measure would lower the likelihood of potential impacts to special-status amphibians, as well as other native amphibians. Work areas within the Proposed Project Area would be clearly delineated with fencing, staking, or flags prior to construction. Construction activities would be restricted to delineated work areas, and delineation would be maintained in working order until the completion of construction to prevent inadvertent impacts to habitats and wildlife outside of work areas, in accordance with APM BIO-04.

Impacts resulting from vegetation clearing would be avoided by conducting surveys prior to clearing to verify avoidance of sensitive resources in accordance with APM BIO-03. Temporary impacts to suitable upland habitat would be restored in accordance with APM BIO-02.

Throughout construction, vehicles would stay on established roadways and/or within disturbance areas, and the speed limit would be limited to 15 mph to minimize the risk of vehicle strikes in accordance with APM BIO-07. All vehicles and equipment maintenance would occur in designated areas located away from aquatic resources.

Refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10. Any spills of hazardous fluids potentially affecting aquatic/breeding habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality.

Should nightwork be required, it is anticipated to occur infrequently, and lighting within the work area would be shielded, oriented downward, and directed away from suitable habitat in accordance with APM BIO-12. In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation.

Field crews would refer any potential environmental issues to the qualified biologist in accordance with APM BIO-05 to determine the best course of action to avoid and minimize resource impacts. If amphibians become active within Proposed Project work areas during construction, then the biological monitor may stop work in accordance with APM BIO-03 if monitoring alone is not effective at avoiding and minimizing impacts to individuals. Excavated holes/trenches that are not filled at the end of a workday would be covered, or a wildlife escape ramp would be installed to prevent the inadvertent entrapment of wildlife species, in accordance with APM BIO-15. With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to amphibian species would be reduced to less than significant. However, the permanent and temporal loss of suitable upland habitat would still be considered a potentially significant impact due to the substantial adverse effect on the habitat. Additionally, the potential for injury or mortality of arroyo toad and western spadefoot would still be considered a potentially significant impact because these species are federally listed and have a potential to occur within the Proposed Project Area.

The CPUC has prescribed MM BIO-13, which would require mitigation for permanent impacts to upland native vegetation communities, including suitable upland habitat for arroyo toad and western spadefoot. The CPUC has also prescribed MM BIO-03, which would require species-specific avoidance and minimization to be implemented during construction of the Proposed Project. Direct effects to these species would also be avoided and minimized by implementing seasonal avoidance when practicable, in accordance with MM BIO-03. For example, Proposed Project activities in upland habitat may be timed to occur during the breeding season when individuals are typically more active and closer to aquatic/breeding habitat. Additionally, a qualified biologist would conduct a sweep of the work area for arroyo toad and western spadefoot and would relocate any individuals found to a safe location. With the implementation of the APMs and MMs BIO-03 and BIO-13, the potential impacts to amphibian species would be less than significant with mitigation because mortality or injury of these species is not anticipated to occur, and unavoidable permanent impacts to habitat would be mitigated for.

The prescribed MM includes the following:

- **MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians.** Prior to vegetation clearing or ground disturbing activities, suitable aquatic/breeding habitat for special-status amphibians (e.g., arroyo toad and western spadefoot) would be surveyed following current agency protocols to determine species presence. If Proposed Project timing does not allow for surveys, all suitable amphibian habitat would be included in those areas requiring implementation of species-specific avoidance and minimization,

which may include survey and monitoring requirements, seasonal constraints, avoidance buffers and/or mitigation as recommended by a qualified biologist. Where temporary or permanent impacts to amphibian species are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Avian Species

Less-than-Significant Impact with Mitigation. Direct impacts to Bell's sparrow, coastal California gnatcatcher, Cooper's hawk, golden eagle, gray vireo, least Bell's vireo, prairie falcon, sharp-shinned hawk, southern California rufous-crowned sparrow, vermilion flycatcher, yellow warbler, and yellow-breasted chat (i.e., avian species) may include potential vehicle strikes during construction, removal of vegetation (i.e., trees or shrubs) that contains nests or roosting sites during construction, or collision and electrocution risk from power lines and other Proposed Project components. Both permanent and temporary direct impacts to suitable habitat of avian species are anticipated as presented in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area.

Avian species may use trees or transmission structures within the survey area associated with the proposed 230 kV transmission line for nest construction or roost sites. Proposed Project activities could result in the potential disruption or destruction of these nest sites, roost sites, or foraging habitat during tree trimming and removal and brush and weed control.

Increased mortality or injury to avian species could also result from vehicular strikes due to increased human and equipment activity related to Proposed Project activities in occupied habitats. Additionally, in regions where the Proposed 230 kV OH segment and aboveground components (i.e., poles and conductors) are planned and overlap with a migratory route for avian species, the Proposed Project may increase potential collision and/or electrocution risk for avian species that could result in mortality or injury. Electrocution risk is further discussed in Section 3.5.4.5.7 Impact BIO-07: Create a Substantial Collision or Electrocution Risk for Birds or Bats.

Although permanent impacts to suitable habitat would occur, the impacts to individual avian species would be minimal because individuals would be able to occupy adjacent habitats. Additionally, impacts would be small in size and spread across a long linear area; as a result, the impacts to any given individual are unlikely to cover the individual's entire home range. Avian species, including bald and golden eagles, only have the potential to forage within the Proposed Project Area; and impacts to bald eagle foraging habitat is not anticipated. Due to the presence of other special-status avian species with both nesting and foraging potential and the permanent impacts to suitable habitat, effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to avian species may include loss of prey from vegetation removal, increased stress from construction noise and lighting, fuel spills, and introduction of invasive plant species that may outcompete native plants that provide higher-quality suitable foraging and nesting habitat. Loss of prey from vegetation removal activities could result in reduced survivorship and reproductive success due to a reduction in available food sources. Noise and lighting from construction activities could decrease suitability of habitat in the vicinity of the Proposed Project.

Noise could affect avian species in a variety of ways, such as disrupting communication between individuals and interfering with foraging or breeding activities. Proposed Project lighting, specifically nighttime lighting, can pose a collision risk by disorienting individuals and can also expose individuals to predation.

Additional indirect impacts to avian species may result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Due to the temporal loss of habitat, suitable foraging and nesting habitat would be decreased within the Proposed Project Area and may result in increased competition with other avian species. Due to the increase in edges, invasive plant species could have more opportunities to invade native habitats, which could result in reduced habitat quality. If invasive plant species proliferate, this may result in an increased risk of wildfire, which could also reduce habitat quality for avian species. Effects resulting from indirect impacts would be considered a potentially significant impact.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. Suitable upland habitat for special-status avian species would be clearly delineated, marked, and avoided by construction activities to the extent practicable in accordance with the implementation of APM BIO-01. Implementation of this APM would lower the likelihood of incidents and potential impacts to special-status avian species, as well as other native avian species. The temporary impacts to suitable habitat would be restored in accordance with APM BIO-02. Furthermore, in portions of the Proposed Project Areas that provide suitable habitat for nesting birds, the qualified biologist would verify exclusion zones are established around all environmentally sensitive resources, in accordance with APM BIO-01. In accordance with APM BIO-07, all vehicles would remain on access roads and within approved work limits and would adhere to strict driving speeds and parking instructions to avoid impacts to both suitable habitat and avian species.

Any spills of hazardous fluids potentially affecting suitable habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation. In accordance with APM BIO-09, the risk of wildfire would be reduced by following most current SDG&E and/or agency fire prevention standards and practices.

In accordance with APMs BIO-01, BIO-03, and BIO-14, prior to any tree removal or brush and weed control, surveys would help to identify trees, vegetation, or burrows that may be housing nests so that these nests can be avoided during construction. Construction activities within suitable habitat for avian species may also require monitoring by a qualified biologist, as per APM BIO-03. Impacts to avian species due to power line collision or electrocution are discussed

in Section 3.5.4.5.7 Impact BIO-07: Create a Substantial Collision or Electrocution Risk for Birds or Bats. Impacts associated with line collision or electrocution would be avoided and minimized by constructing the Proposed Project in accordance with APLIC guidelines in accordance with APM BIO-17.

The introduction of invasive plant species would be managed in accordance with APM BIO-13. All field crews and contractors would coordinate with a qualified biologist to implement preventative BMPs, such as biomass removal and vehicle washing, to reduce the introduction of invasive plant species to work areas. Implementation of these practices would decrease the potential for invasive plant species to be introduced and subsequently lower competition with native plants. Construction noise that could contribute to increased avian stress and decreased suitability of habitat would be restricted to a set schedule, in accordance with APM NOI-01 as described in Section 3.14 Noise. Should nightwork be required, it is anticipated to occur infrequently, and lighting within the work area would be shielded, oriented downward, and directed away from suitable habitat in accordance with APM BIO-12.

With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to avian species would be reduced to less than significant. However, the permanent and temporal loss of suitable habitat for avian species would still be considered a potentially significant impact due to the substantial adverse effect on the habitat. Additionally, the potential for injury or mortality of coastal California gnatcatcher and least Bell's vireo would still be considered a potentially significant impact because these species are federally and state-listed and have the potential to nest within the Proposed Project Area.

The CPUC has prescribed MM BIO-13 that would require mitigation for permanent impacts to upland native vegetation communities including suitable habitat for coastal California gnatcatcher and least Bell's vireo. Additionally, the CPUC has prescribed MMs BIO-04 and BIO-05, which require implementation of avoidance and minimization measures for coastal California gnatcatcher and least Bell's vireo to mitigate for adverse effects to avian species. In accordance with MMs BIO-04 and BIO-05, effects to these species would also be avoided by implementing seasonal restrictions. Proposed Project activities in nesting habitat for these species would be timed to avoid the nesting season to the extent practicable. Effects to these species would also be minimized by implementing exclusion buffers around active nests. With the implementation of the APMs and MMs BIO-04, BIO-05, and BIO-13, the potential impacts to avian species would be less than significant with mitigation because mortality or injury of these species is not anticipated to occur, and unavoidable permanent impacts to habitat would be mitigated for.

Prescribed MMs include the following:

- **MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures.** SDG&E would incorporate CAGN species-specific avoidance and minimization measures in the Proposed Project-specific NBMP. Where temporary or permanent impacts to CAGN are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

- **MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures.** SDG&E would incorporate LBV species-specific avoidance and minimization measures in the Proposed Project-specific NBMP. Where temporary or permanent impacts to LBV are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Butterflies

Less-than-Significant Impact with Mitigation. Direct impacts to monarch, Hermes copper, and Quino checkerspot butterflies (i.e., butterflies) that may be caused by the Proposed Project may result from potential vehicle strikes or crushing of individuals during construction and vegetation-clearing activities. Adult butterflies would be more vulnerable to vehicle strikes whereas eggs, larva, or pupa would be more vulnerable during vegetation-clearing activities. Eggs, larva, or pupa would be difficult to detect and would likely go unnoticed, resulting in the crushing or burying of individuals at these life stages. Both permanent and temporary direct impacts to suitable habitat of butterflies are anticipated, as presented in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area.

Suitable habitat for butterfly species varies according to the species. Monarch butterfly foraging and migratory habitat is present throughout the Proposed Project Area where floral resources occur; however, no host plants (i.e., milkweed [*Asclepias* spp.]) were observed within the Proposed Project. No overwintering habitat for monarch butterfly occurs within the Proposed Project. Hermes copper butterfly and Quino checkerspot butterfly suitable habitat is limited to habitats that contain the host plant(s) for these species. Due to the presence of host plants for Hermes copper butterfly and Quino checkerspot butterfly and recent, nearby records, it anticipated that a portion of the suitable habitat is occupied by these species. However, due to the narrow habitat requirements, and limited range and dispersal ability of Hermes copper butterfly, this species is unlikely to be found within a majority of suitable habitat within the Proposed Project Area. Due to the potential direct impacts to special-status butterfly species individuals and the permanent impacts to suitable habitat, effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to butterflies during construction may include decreased suitability of habitat in the vicinity of the Proposed Project Area caused by increased noise from construction activities, vehicular traffic, nighttime lighting, fuel spills, and increased human activity. Noise from construction activities can affect wildlife in multiple ways, such as interfering with foraging activities. However, noise during construction activities is expected to be short term in nature and minimal. Nighttime lighting may disorient butterflies, alter behavior, and increase their exposure to predators, resulting in reduced survivorship.

Additional indirect impacts to butterflies may result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Nectar sources may be decreased within the Proposed Project Area and may result in increased interaction with other butterflies causing increased competition for floral resources. Invasive plant species could invade suitable habitat from the edges of Proposed Project work areas, which could result in reduced habitat quality. Dust generated from ground-disturbing activities could coat the leaves of plants, reducing the quantity of flowers produced by individual plants. This could reduce the quantity and/or quality

of nectar from floral resources or reduce the overall growth of host plants within the Proposed Project Area. Vegetation-clearing activities could result in the loss of host plants for these species and thus limit reproductive potential and population growth. This could especially impact Hermes copper butterfly due to the limited dispersal distance of this species. Conversely, edge effects may result in beneficial effects to butterflies. Hermes copper butterfly prefers edges of habitat for patrolling territories and host plants for laying eggs. Effects resulting from indirect impacts would be considered a potentially significant impact.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. The temporary impacts to suitable upland habitat would be restored in accordance with APM BIO-02. Additionally, restoration efforts would consider floral resources and host plants for butterflies as applicable. Host plants would be delineated and avoided to the extent practicable in accordance with APM BIO-01. In some cases, host plants for Hermes copper butterfly may be relocated along with any eggs on the plants to minimize impacts to this species. If impacts to host plants are unavoidable, then impacted host plant species could be incorporated into restoration plans where appropriate. To reduce impacts to these species during construction, training would be implemented to educate construction workers on proper work practices to avoid harming butterflies, in accordance with APM BIO-05. Dust would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality, which would prevent and minimize dust from settling onto vegetation.

Any spills of hazardous fluids potentially affecting suitable habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

Throughout construction, vehicles would stay on established roadways and/or within disturbance areas and the speed limit would be 15 mph, in accordance with APM BIO-07, thus minimizing the risk of vehicle strikes to adult butterflies. In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation.

Butterflies may avoid the Proposed Project Area during construction activities due to the increased noise and activity. Work areas within the Proposed Project Area would be clearly delineated with fencing, staking, or flags prior to construction. Construction activities would be restricted to delineated work areas, and delineation would be maintained in working order until the completion of construction to prevent inadvertent impacts to habitats and wildlife outside of work areas, in accordance with APM BIO-04. In the infrequent event of night work, nighttime lighting within the work area would be shielded, oriented downward, and directed away from suitable habitat for butterflies in accordance with APM BIO-12.

With the implementation of the measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to butterflies would be reduced to less than significant. However, the permanent and temporal loss of suitable habitat for butterflies would still be considered a potentially significant impact due to the substantial adverse effect on the habitat. Additionally, the potential for injury or mortality of butterflies—particularly in the egg, larval, or pupal stages—would still be considered a potentially significant impact because these species are federally and/or state-listed and have the potential to occur within the Proposed Project Area.

The CPUC has prescribed MM BIO-13, which would require mitigation for permanent impacts to upland native vegetation communities, including suitable habitat for butterflies. If Hermes copper butterfly and/or Quino checkerspot butterfly are found to occupy habitat within Proposed Project work areas, then temporal loss of habitat would also be mitigated in accordance with MMs BIO-07 and BIO-09. The CPUC has prescribed MMs BIO-06 and BIO-08, which require implementation of avoidance and minimization measures for Hermes copper butterfly and Quino checkerspot butterfly to mitigate for adverse effects to these species.

Direct effects to these species would be avoided and minimized with the implementation of these measures through the use of exclusion buffers and conducting focused surveys to identify host plants. Host plants would be flagged and avoided, or relocated to the extent practicable. Additionally, focused surveys for these species may be conducted to determine if habitat is occupied. However, if the Proposed Project timing does not allow for these surveys to be conducted, then habitat may be assumed to be occupied. If take of a federally and/or state-listed species is anticipated, then SDG&E would comply with FESA and/or CESA and seek appropriate incidental take coverage for impacts to those species. Avoidance and minimization measures would be implemented in accordance with resource agency agreement, permits, and policies. With the implementation of the APMs and MMs BIO-06 through BIO-09, the potential impacts to butterflies would be less than significant with mitigation.

Prescribed MMs include the following:

- **MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measures.** SDG&E would implement HCB species-specific avoidance and minimization measures, such as protocol-level surveys, survey and monitoring requirements, seasonal restrictions, and avoidance buffers, as defined in applicable resource agency protocols, project-specific permits, and/or species-specific protocols in SDG&E's HCP Amendment.

- **MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat.** If permanent impacts to occupied HCB habitat are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

- **MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures.** SDG&E would implement QCB species specific avoidance and minimization measures, such as protocol-level surveys, survey and monitoring requirements, seasonal constraints, and avoidance buffers, in accordance with applicable resource agency

protocols, project-specific permits, and/or species-specific protocols in SDG&E's Quino LEHCP.

- **MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat.** If permanent impacts to occupied QCB habitat are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Crotch's Bumble Bee

Less-than-Significant Impact with Mitigation. Direct impacts during construction to Crotch's bumble bee may result from potential vehicle strikes or crushing of individuals, destruction of nest sites, and vegetation-clearing activities that remove their habitat. During the colony active period, adults would be more vulnerable to vehicle strikes, whereas overwintering bees would be more vulnerable to crushing and burying. Both permanent and temporary direct impacts to suitable foraging and colony nesting habitat of Crotch's bumble bee are anticipated, as detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. Although permanent impacts to suitable habitat would occur, the impacts to individuals would be minimal because individuals would be able to occupy adjacent suitable habitat. Additionally, impacts would be small in size and spread across a long linear area. Effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to Crotch's bumble bee during construction may include decreased suitability of habitat in the vicinity of the Proposed Project Area caused by increased noise from construction activities, vehicular traffic, nighttime lighting, fuel spills, and increased human activity. Noise from construction activities can affect wildlife in multiple ways, such as interfering with foraging activities. However, noise during construction activities is expected to be short term in nature and minimal. Nighttime lighting may disorient bees, alter behavior, and increase their exposure to predators resulting in reduced survivorship.

Additional indirect impacts may result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Floral nectar resources would be decreased within the Proposed Project Area and may result in increased interaction with non-native honeybees. This would result in increased competition for food and space, and potentially the introduction of diseases or parasites. Invasive plant species could invade suitable habitat from edges of Proposed Project work areas, which could result in reduced habitat quality. Dust generated from ground-disturbing activities could coat the leaves of plants, reducing the quantity of flowers produced by individual plants. This could reduce the quantity and quality of nectar from floral resources within the Proposed Project Area. Effects resulting from indirect impacts would be considered a potentially significant impact.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. To reduce impacts to this species during construction, training would be implemented to educate all construction workers on proper work practices to avoid harming Crotch's bumble bee, in accordance with APM BIO-05. Temporary impacts to suitable habitat would be restored in accordance with APM BIO-02. Preferred nectar sources of Crotch's bumble bee would be incorporated into restoration plans as appropriate.

Throughout construction, vehicles would stay on established roadways and/or within disturbance areas, and the speed limit would be limited to 15 mph, in accordance with APM BIO-07, thus minimizing the risk of vehicle strikes. All work areas within the Proposed Project Area would be clearly delineated with fencing, staking, or flags prior to construction. Construction activities would be restricted to delineated work areas, and all delineation would be maintained in working order until the completion of construction to prevent inadvertent impacts to habitats and wildlife outside of work areas, in accordance with APM BIO-04.

Any spills of hazardous fluids potentially affecting suitable habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

In the infrequent event of night work, lighting within the work area would be shielded, oriented downward, and directed away from habitat suitable for Crotch's bumble bee in accordance with APM BIO-12. Dust would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality. In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation. With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to Crotch's bumble bee would be reduced to less than significant. However, the permanent and temporal loss of suitable habitat for bees would still be considered a potentially significant impact due to the substantial adverse effect on the habitat. Additionally, the potential for injury or mortality of bees would still be considered a potentially significant impact because this species is state-listed and has the potential to occur within the Proposed Project Area.

The CPUC has prescribed MM BIO-13, which would require mitigation for permanent impacts to upland native vegetation communities including suitable habitat for Crotch's bumble bee. If Crotch's bumble bee is found to occupy habitat within Proposed Project work areas, then temporal loss of habitat would also be mitigated by acquiring compensatory mitigation in accordance with MM BIO-11. Additionally, the CPUC has prescribed MM BIO-10, which requires implementation of avoidance and minimization measures for the Crotch's bumble bee to mitigate for adverse effects to these species. Direct effects to these species would be avoided and minimized through avoidance buffers and focused surveys to identify nests. If take of a state-listed species is anticipated, then SDG&E would comply with CESA and seek appropriate incidental take coverage for impacts to those species. Avoidance and minimization measures would be implemented in accordance with resource agency agreement, permits, and policies. With the implementation of the APMs and MMs BIO-10, BIO-11, and BIO-13, the potential impacts to Crotch's bumble bee would be less than significant with mitigation.

Prescribed MMs include the following:

- **MM BIO-10. Crotch's Bumble Bee (CBB) Avoidance and Minimization Measures.** SDG&E would implement CBB species-specific avoidance and minimization measures, such as protocol survey, survey and monitoring requirements, seasonal restrictions, and avoidance buffers, in accordance with applicable resource agency protocols or project-specific permits.

- **MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat.** If permanent impacts to occupied CBB habitat are unavoidable, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Bat Species

Less-than-Significant Impact. Direct impacts that may be caused by the Proposed Project to big free-tailed bat (*Nyctinomops macrotis*), fringed myotis (*Myotis thysanodes*), Mexican long-tongued bat (*Choeronycteris mexicana*), pallid bat (*Antrozous pallidus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and western mastiff bat (*Eumops perotis californicus*) (i.e., bats) may include potential vehicle strikes during construction; removal of vegetation (including trees) or transmission poles that house roosting sites during construction; and the temporary or permanent conversion potentially suitable roosting and foraging habitat. Bat species in the Proposed Project Area may use trees or transmission structures within the survey area as roosting sites and a wide variety of habitats for foraging purposes. Permanent impacts to natural roost sites (i.e., trees and rock crevices in cliff faces) are not anticipated because Proposed Project work areas generally avoid habitat with these features. Proposed Project activities could result in the potential disruption or destruction of other roost sites (i.e., transmission structures) or foraging habitat.

Increased mortality or injury to bat species could also result from vehicular strikes due to increased human and equipment activity related to Proposed Project activities in occupied habitats. Additionally, in regions where the Proposed 230 kV OH segment and other aboveground components are planned and overlap with a flight path for bat species, the Proposed Project may increase potential collision and/or electrocution risk for bat species that could result in mortality or injury. SDG&E operates some existing transmission infrastructure near the Proposed Project that already creates collision risks for bat species, and the total number of transmission structures in the area would be increased by the construction of the proposed 230 kV OH segment. However, the risk for collision is low due to bats' use of echolocation. The risk of electrocution is also low or non-existent as all bat species with the potential to occur have a wingspan that is less than the Proposed Project's conductor spacing (EirGrid 2015). Both permanent and temporary direct impacts to suitable habitat of various bat species are anticipated and are detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. Although the Proposed Project activities could result in the potential disruption or destruction of roosting and foraging habitat, due to the limited roosting habitat present in the survey area, the ability of bats to echolocate to avoid collisions, and the availability of suitable foraging habitat in the vicinity of the Proposed Project, effects resulting from direct impacts would be considered less than significant.

Indirect impacts to bat species during construction may include decreased suitability of habitat in the vicinity of the Proposed Project Area caused by factors such as increased noise from construction activities, nighttime lighting installed within work areas, fuel spills, and increased human activity. Noise from construction activities can affect bat species in multiple ways, such as depressing breeding success by acoustical masking, interfering with intra-specific communication, and interfering with the detection of predators. Because bats are nocturnal, construction activities may also disrupt breeding and foraging activities, especially if nighttime work is required. Bat species would likely temporarily avoid the work area during construction activities due to the increased noise and activity.

Additional indirect impacts to bat species may result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Suitable foraging habitat would be decreased within the Proposed Project Area, resulting with increased competition with other bat species. Invasive plant species could also invade suitable habitat from the edges of the Proposed Project Area, which could result in reduced habitat quality. Suitable roosting habitat for bat species could be indirectly impacted by the Proposed Project due to the increased noise, vibrations, and human activity associated with the Proposed Project. However, these impacts are anticipated to be minimal, because roosting habitats are generally located outside of impact areas and similar alternate roosting habitats exist adjacent to the Proposed Project. Effects resulting from indirect impacts would be considered less than significant as roosting sites (i.e., trees and rock crevices) within the impact areas are anticipated to be limited. Additionally, bats can travel large distances and would likely avoid the Proposed Project Area or utilize adjacent habitat for foraging. Lastly, nighttime work is expected to be infrequent if it were to occur. Therefore, effects resulting from indirect impacts would be considered less than significant.

Although effects are anticipated to be less than significant, APMs implemented to avoid and minimize impacts to other special-status species would further reduce impacts. Temporary impacts to suitable foraging habitat would be restored in accordance with APM BIO-02. In accordance with APM BIO-01, ESAs would be delineated for avoidance of any trees, rock crevices, or other roosting structures that may be housing bat roosts. These areas would be clearly marked at the discretion of a qualified biologist so that these roosts can be avoided during construction. Construction activities that may result in impacts to bat roosts would be monitored by a qualified biologist in accordance with APM BIO-03. Tree trimming would also be conducted in accordance with APM BIO-14 to minimize potential impacts to bats.

Impacts to bat species due to power line collision or electrocution are discussed in Section 3.5.4.5.7 Impact BIO-07: Create a Substantial Collision or Electrocution Risk for Birds or Bats, but are not anticipated to be significant due to the ability of bats to echolocate and avoid power lines and other aboveground components. Construction noise that could contribute to increased stress and decreased suitability of habitat would be restricted to a set schedule, in accordance with APM NOI-01 as described in Section 3.14 Noise. Should nightwork be required, it is anticipated to occur infrequent, and lighting within the work area would be shielded, oriented downward, and directed away from suitable habitat in accordance with APM BIO-12. To minimize disturbance from human activity, in accordance with APM BIO-07, all vehicles would remain on access roads and within approved work limits and would adhere to strict driving speeds and parking instructions to avoid impacts to bats.

Any spills of hazardous fluids potentially affecting suitable habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

The introduction of invasive plants would be managed in accordance with APM BIO-13. All field crews and contractors will coordinate with the qualified biologist to implement preventative BMPs, such as biomass removal and vehicle washing, to reduce the introduction of invasive plant species to work areas. Implementation of these practices would decrease the potential for invasive plant species to be introduced and subsequently would lower competition with native plants. In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation. While direct and indirect impacts to bat species would be less than significant, implementation of the APMs would further reduce potential impacts.

Other Mammal Species

Less-than-Significant Impact with Mitigation. Direct impacts that may be caused by construction of the Proposed Project to American badger (*Taxidea taxus*) and San Diego desert woodrat (*Neotoma lepida intermedia*) (i.e., mammals) could occur from potential vehicle strikes, destruction of burrows or dens during excavation, and/or entrapment in excavations. Proposed Project activities could result in injury or increased stress to mammal species if individuals need to be relocated from work areas or from burrows within the work areas. Both permanent and temporary direct impacts to occupied mammal habitat are anticipated and detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. Effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to mammals during construction could include the decreased suitability of habitat in the vicinity of the Proposed Project Area caused by soil compaction, increased noise from construction activities and vehicles, fuel spills, nighttime lighting installed within work areas, increased human activity, and introduction of non-native weed species that may decrease foraging suitability in existing habitat. Noise from construction activities can affect wildlife in multiple ways, such as depressing breeding success by acoustical masking and interfering with foraging activities. However, noise during construction activities is expected to be short term and intermittent in nature.

Heavy equipment operation, vehicular traffic, ground-disturbing activities, vegetation removal, and other construction associated with the Proposed Project could disrupt breeding and foraging activities or cause individuals to vacate their burrows, thus endangering young and exposing adults to predation. Nighttime lighting installed in work areas, if required, would be limited, but may further disrupt breeding and foraging activities for nocturnal mammals in the immediate vicinity of the Proposed Project Area by disorienting species accustomed to low-light environments and exposing them to predation. Additionally, indirect impacts to mammals may

result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Suitable foraging habitat would be decreased within the Proposed Project Area and may result in increased interaction with other mammals, causing increased competition for food. Invasive plant species could also invade suitable habitat from the edges of the Proposed Project Area, which could result in reduced habitat quality. Effects resulting from indirect impacts would be considered a potentially significant impact.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. If suitable mammal habitat is observed in the Proposed Project Area that was not previously surveyed, supplemental field surveys (in accordance with APM BIO-01) would identify any individuals or burrows that may be occupied by other mammals. If burrows or dens are identified within Proposed Project work areas, impacts to those burrows or dens would be avoided by marking the burrows or dens or minimized by excavating, temporarily plugging, or dismantling the burrow or dens in accordance with APM BIO-16. Throughout construction, vehicles would stay on established roadways and within disturbance areas, and the speed limit would be limited to 15 mph in accordance with APM BIO-07 to minimize the risk of vehicle strikes.

Any spills of hazardous fluids potentially affecting suitable habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

Mammals would likely avoid work areas during construction activities due to the increased noise and activity. Excavated holes/trenches that are not filled at the end of a workday would be covered, or a wildlife escape ramp would be installed to prevent the inadvertent entrapment of wildlife species in accordance with APM BIO-15. Work areas for the Proposed Project would be clearly delineated with fencing, staking, or flags prior to construction. Construction activities would be restricted to delineated work areas, and delineation would be maintained in working order until the completion of construction to prevent inadvertent impacts to habitats and wildlife outside of work areas in accordance with APM BIO-04. Construction noise that could contribute to decreased suitability of habitat would be restricted to a set schedule, in accordance with APM NOI-01 as described in Section 3.14 Noise.

Should nightwork be required, it is anticipated to occur infrequently, and nighttime lighting within the work area would be shielded, oriented downward, and directed away from habitat suitable for mammal occupation, in accordance with APM BIO-12. In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation. With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to mammals would be reduced to less than significant. However, the

permanent and temporal loss of suitable habitat for mammals would still be considered a potentially significant impact due to the substantial adverse effect on the habitat.

The CPUC has prescribed MM BIO-13, which would require mitigation for permanent impacts to upland native vegetation communities including suitable habitat for mammals. With the implementation of the APMs and MM BIO-13, the potential impacts to mammals would be less than significant with mitigation.

Reptile Species

Less-than-Significant Impact with Mitigation. Direct impacts to California glossy snake (*Arizona elegans occidentalis*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake, coastal rosy boa, coastal whiptail, Coronado skink (*Plestiodon skiltonianus interparietalis*), orange-throated whiptail (*Aspidoscelis hyperythra*), red-diamond rattlesnake, San Diego banded gecko (*Coleonyx variegatus abbotti*), San Diego mountain kingsnake (*Lampropeltis zonata pulchra*), San Diego ringneck snake (*Diadophis punctatus similis*), southern California legless lizard (*Anniella stebbinsi*), and two-striped gartersnake (*Thamnophis hammondii*) (i.e., reptiles) that may be caused by the Proposed Project could result from vehicle strikes during construction, destruction of burrows or other shelter sites during construction and vegetation-clearing activities, and entrapment in excavations. Both permanent and temporary direct impacts to suitable reptile habitat are anticipated and detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area. Proposed Project activities could result in the potential disruption or destruction of these burrows or shelter sites. Increased mortality or injury to reptile species could also result from vehicular strikes due to increased human and equipment activity related to Proposed Project activities in occupied habitats. Additionally, excavations created for Proposed Project components could potentially entrap individuals that move into work areas. Effects of direct impacts to reptile species would be considered potentially significant.

Indirect impacts to reptiles during construction could include decreased suitability of habitat in the vicinity of the Proposed Project Area caused by factors such as increased noise from construction activities, vehicular traffic, fuel spills, nighttime lighting installed within the Proposed Project Areas, and increased human activity. Noise from construction activities can affect wildlife in multiple ways, such as interfering with foraging activities. Heavy equipment operation, vehicular traffic, ground-disturbing activities, vegetation removal, and other construction associated with the Proposed Project could disrupt breeding and foraging activities or cause individuals to vacate their burrows or shelter sites or flush from vegetation cover, thus exposing them to predation.

Nighttime lighting installed in the Proposed Project Area would be limited, but may further disrupt breeding and foraging activities for reptiles in the immediate vicinity of the Proposed Project by disorienting individuals and exposing them to predation. Additionally, indirect impacts to reptile species may result from the temporal loss of habitat and increased habitat fragmentation and edge effects. Suitable foraging habitat would be decreased within the Proposed Project Area and may result in increased interaction with other reptiles, causing increased competition for food. Invasive plant species could also invade from the edges of the Proposed Project Area and compete with native plant species, resulting in a reduction in habitat quality. Effects resulting from indirect impacts would be considered potentially significant.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. Throughout construction, vehicles would stay on established roadways and/or within disturbance areas, and the speed limit would be 15 mph to minimize the risk of vehicle strikes, in accordance with APM BIO-07. Reptiles would likely avoid active construction areas due to the increased noise and human presence. Excavated holes/trenches that are not filled at the end of a workday would be covered, or a wildlife escape ramp would be installed to prevent the inadvertent entrapment of individuals, in accordance with APM BIO-15. Work areas for the Proposed Project would be clearly delineated with fencing, staking, or flags prior to construction. Construction activities would be restricted to delineated work areas, and all delineation would be maintained in working order until the completion of construction to prevent inadvertent impacts to habitats and wildlife outside of work areas, in accordance with APM BIO-04. In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation.

Indirect impacts to reptile species are anticipated, including decreased habitat suitability from noise and lighting. Construction noise that could contribute to increased reptilian stress and decreased suitability of habitat would be restricted to a set schedule, in accordance with APM NOI-01 as described in Section 3.14 Noise.

Should nightwork be required, it is anticipated to occur infrequently, and lighting within the work area would be shielded, oriented downward, and directed away from habitat suitable for avian occupation in accordance with APM BIO-12. The introduction of invasive plants would be managed in accordance with APM BIO-13. All field crews and contractors would coordinate with the qualified biologist to implement preventative BMPs (e.g., biomass removal and vehicle washing) to reduce the introduction of invasive plant species to work areas. Implementation of these practices would decrease the potential for invasive plant species to be introduced and subsequently lower competition with native plants.

Any spills of hazardous fluids potentially affecting reptile habitat would be avoided and minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas and refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

Furthermore, although reptile species could be indirectly affected by vegetation removal due to increased predation risk from loss of habitat, the effect is anticipated to be minimal due to the availability of cover sites in adjacent habitat. All temporarily impacted areas would also be restored to pre-construction conditions in accordance with APM BIO-02. With the implementation of the APMs discussed, direct and indirect impacts to reptile species and their suitable habitat may still result in potentially significant impacts due to the permanent loss of suitable habitat.

The CPUC has prescribed MM BIO-13, which would require mitigation for permanent impacts to upland native vegetation communities including suitable habitat for reptile. With the implementation of the APMs and MM BIO-13, the potential impacts to reptiles would be less than significant.

Southwestern Pond Turtle

Less-than-Significant Impact with Mitigation. Direct impacts to southwestern pond turtle may result from potential vehicle strikes during construction, destruction of nest sites during construction and vegetation-clearing activities, and entrapment in excavations. Dispersing individuals or females in search of nesting sites would be at the greatest risk of direct impacts. Both permanent and temporary direct impacts to suitable upland habitat for southwestern pond turtles are anticipated and detailed in Table 3.5-4: Impacts to Suitable Special-Status Wildlife Species Habitat within the Survey Area.

No direct impacts to suitable aquatic/breeding habitat of southwestern pond turtle are anticipated because Proposed Project work areas have been designed to avoid aquatic features that may function as aquatic/breeding habitat. As a large portion of the Proposed Project work area associated with potential impacts to suitable aquatic/breeding habitat consists of an unpaved access road, the upland habitat is low quality. The upland habitat is also located far from the suitable aquatic/breeding habitat (i.e., approximately 135 feet) so individuals are unlikely to utilize this upland habitat. A high quantity of similar upland habitat along Taylor Creek would help minimize the potential for impacts to pond turtle caused by this loss of habitat because individuals could utilize adjacent habitat to avoid Proposed Project work areas. Effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to southwestern pond turtle during construction may include decreased suitability of habitat in the vicinity of the Proposed Project caused by factors such as increased noise from construction activities, fuel spills, vehicular traffic, nighttime lighting, and increased human activity. Noise from construction activities can affect wildlife in multiple ways, such as depressing breeding success by acoustical masking and interfering with foraging activities. Nighttime lighting may disorient pond turtles, alter their behavior, and increase their exposure to predators, resulting in reduced survivorship.

Construction activities may disrupt breeding and foraging activities or cause individuals to flush from vegetation cover or basking sites, exposing them to predation and disrupting thermal regulation, respectively. Pond turtles would likely avoid the Proposed Project Area during construction activities due to the increased noise and activity. Additionally, noise during construction activities is expected to be short term in nature and minimal. Effects resulting from indirect impacts would be considered a potentially significant impact.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. The temporary impacts to suitable upland habitat would be restored in accordance with APM BIO-02. To reduce impacts to this species during construction, training would be implemented to educate all construction workers on proper work practices to avoid harming pond turtle in accordance with APM BIO-05. Throughout construction, vehicles would stay on established roadways and/or within disturbance areas and the speed limit would be 15 mph to minimize the risk of vehicle strikes, in accordance with APM BIO-07. All excavated

holes/trenches that are not filled at the end of a workday would be covered, or a wildlife escape ramp would be installed to prevent the inadvertent entrapment of wildlife species, in accordance with APM BIO-15. All work areas within the Proposed Project Area would be clearly delineated with fencing, staking, or flags prior to construction. Construction activities would be restricted to delineated work areas, and all delineation would be maintained in working order until the completion of construction to prevent inadvertent impacts to habitats and wildlife outside of work areas, in accordance with APM BIO-04. In the infrequent event of night work, lighting within the work area would be shielded, oriented downward, and directed away from habitat suitable for pond turtle occupation in accordance with APM BIO-12.

Any spills of hazardous fluids potentially affecting aquatic/breeding habitat would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. All vehicles and equipment maintenance would occur in designated areas located away from aquatic resources. Refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to suitable habitat in accordance with APM BIO-10.

In accordance with APM BIO-05, all SDG&E contractors and employees would attend a WEAP training to educate all personnel on the identification of sensitive resources, a summary of Proposed Project requirements including the APMs, and the communication protocols if a resource is identified. The WEAP training would provide SDG&E personnel and contractors with background on each APM and procedures for successful implementation.

With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, most direct and indirect impacts to pond turtle would be reduced to less than significant. However, the permanent and temporal loss of suitable habitat for pond turtle would still be considered a potentially significant impact due to the substantial adverse effect on the habitat. Additionally, the potential for injury or mortality of pond turtle would still be considered a potentially significant impact because this species is federally listed and has the potential to occur within the Proposed Project Area.

The CPUC has prescribed MM BIO-13, which would require mitigation for permanent impacts to upland native vegetation communities including suitable habitat for southwestern pond turtle. Additionally, the CPUC has prescribed MM BIO-12, which requires implementation of avoidance and minimization measures for pond turtle to mitigate for adverse effects to these species. Biological monitoring would be conducted to determine if habitat is occupied, and direct effects to pond turtle would be avoided by timing Proposed Project activities to take place outside of the breeding/nesting season. With implementation of these measures and the avoidance of aquatic/breeding habitat, mortality or injury of pond turtle is not anticipated. Therefore, with the implementation of the APMs and MM BIO-12, the potential impacts to pond turtle would be less than significant with mitigation.

The prescribed MM includes the following:

- **MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures.** SDG&E would implement southwestern pond turtle species-specific avoidance and

minimization measures, such as protocol-level surveys, survey and monitoring requirements, seasonal restrictions, and avoidance buffers, in accordance with landowner or resource agency agreements, permits, and policies.

Operations and Maintenance

Less-than-Significant Impact. Preventative maintenance activities for the Proposed Project components would be similar to those currently performed by SDG&E for existing facilities in the area. SDG&E would inspect the proposed 230 kV transmission line in a manner consistent with CPUC GO 165, which would require approximately one trip per year by crews composed of one to four people. Annual comprehensive checks and maintenance would be performed by SDG&E maintenance personnel or qualified contractors. Preventative maintenance at the existing Suncrest Substation would involve quarterly inspections. A small, specialized team would be utilized to perform more extensive maintenance activities. Nighttime lighting is currently used at the existing Suncrest Substation; and the Proposed Project would not increase the amount of lighting needed at the facility and would not result in any additional potential impacts to nocturnal species.

O&M activities may result in the direct crushing or potential vehicle or equipment strikes to individual special-status wildlife that may result in injury or mortality of individuals. Tree trimming and brush and weed control may result in bird nest and bat roost disruption or destruction. For this reason, vegetation management activities would be scheduled outside of the nesting bird season to the greatest extent feasible and vegetation removal would be limited to the minimum necessary to complete operations. Given the short duration and infrequent nature of these operations, impacts would be less than significant.

United States Fish and Wildlife Service-Designated Critical Habitat

Construction, Operations and Maintenance

Less-than-Significant Impact with Mitigation. As depicted in Figure 3.5-1: Critical Habitat within the Vicinity of the Proposed Project Area and described in the USFWS-Designated Critical Habitat subsection of Section 3.5.2.4 Special-Status Plant and Wildlife Species, USFWS-designated critical habitats for arroyo toad and Hermes copper butterfly are located within the Proposed Project Area. The Proposed Project would result in both temporary and permanent impacts to both arroyo toad and Hermes copper butterfly designated critical habitats, as detailed in Table 3.5-6: Impacts to USFWS-Designated Critical Habitat within the Survey Area. The calculated temporary and permanent impact areas also include areas of existing bare ground and developed land covers that occur within the designated critical habitat. Specifically for Hermes copper butterfly, critical habitat overlaps the existing Suncrest Substation, as well as disturbed habitat and developed land cover along La Cresta Road. Bare ground and developed land covers would not provide suitable habitat for arroyo toad and Hermes copper butterfly. Therefore, the amount of temporary and permanent impacts is a conservative estimate of the potential impacts.

Table 3.5-6: Impacts to USFWS-Designated Critical Habitat within the Survey Area

Critical Habitat	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)	Approximate Total Impacts (acres)
Arroyo toad	0.26	0.48	**0.74**
Hermes copper butterfly	14.14	4.17	**18.31**

Direct impacts to critical habitat would occur during the construction of the Proposed Project and during O&M activities as a result of vegetation removal that may include removal of Hermes copper butterfly host plants, vegetation trimming, access road construction, and the placement and construction of permanent transmission poles and infrastructure within critical habitat. These activities would reduce the amount of available critical habitat for arroyo toad and Hermes copper butterfly or may degrade the quality of the critical habitat. The permanent conversion of approximately 0.48 acre of critical habitat for arroyo toad and 4.17 acres of Hermes copper butterfly critical habitat is unavoidable. However, permanent impacts from individual proposed pole locations would be spread between three locations and have a relatively small footprint (i.e., approximately 0.16 acre per location) within arroyo toad critical habitat areas. Permanent impacts from construction activities to Hermes copper butterfly critical habitat would primarily be spread between 21 proposed pole locations and relatively small (i.e., approximately 0.18 acre per location) for each of the Proposed Project components, including planned upgrades associated with the existing Suncrest Substation, in relation to the overall available Hermes copper butterfly habitat in and around the Proposed Project Area. Effects resulting from direct impacts would be considered a potentially significant impact.

Indirect impacts to critical habitat may occur during construction and O&M activities as a result of the introduction of invasive plant species that may contribute to the degrading habitat quality; compaction or erosion of soils from construction equipment; potential runoff impacts from temporary work areas into critical habitat; and dust settling on plants, reducing the photosynthetic capacity of plants, and resulting in degraded quality of the critical habitat. Such impacts may result in reduced growth of individuals, reduction in population size, or other impacts to the species. Effects resulting from indirect impacts would be considered a potentially significant impact.

Dust would be minimized in in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality, and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality. In addition, in accordance with APM BIO-02, all temporary impact areas would be restored following construction. Potential erosion resulting from soil compaction would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. APMs BIO-03 through BIO-05, BIO-07, BIO-10, BIO-13, and BIO-14 would help verify that any work occurring within critical habitat is conducted in a manner that would minimize impacts to the critical habitat, that workers would be made aware of the measures required to avoid and minimize impacts to critical habitat, and that activities would be monitored by a qualified biologist. Additionally, MMs BIO-03 and BIO-06 require that additional measures be taken to avoid and minimize impacts to arroyo toad and Hermes copper

butterfly, respectively. SDG&E would mitigate for the permanent habitat impacts in accordance with MMs BIO-07 and BIO-13. Accordingly, direct and indirect impacts would be less than significant with mitigation and would be avoided or further minimized by the implementation of the APMs and MMs discussed.

3.5.4.5.2 Impact BIO-02: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction

Less-than-Significant Impact with Mitigation. The Proposed Project would result in temporary and permanent impacts within various vegetation communities and land covers (approximately 49.78 acres and 8.62 acres, respectively), and the impact acreages are provided in Table 3.5-7: Impacts to Vegetation Communities within the Proposed Project Area. This table provides a general overview of the anticipated temporary and permanent impacts from the Proposed Project and the following paragraphs discuss and analyze impacts specific to sensitive natural communities and riparian habitat. Proposed temporary and permanent impacts to vegetation communities would overlap with Preserves and Proposed Preserves that are present in the Proposed Project Area and associated with a variety of HCPs and NCCPs (SDG&E 2024a). Potential impacts to Preserves or Proposed Preserves are discussed in Section 3.5.4.5.6 Impact BIO-06: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?.

Multiple sensitive natural vegetation communities and habitats are located within the survey area, mainly associated with riparian corridors and streams along Taylor Creek, Sweetwater River, Forester Creek, and their tributaries. As discussed in Section 3.5.2.3 Natural Vegetation Communities, many of these communities provide suitable habitat for special-status species, as well as native species. Additionally, sensitive natural vegetation communities are located within the survey area within both upland and riparian communities. As detailed in Table 3.5-7: Impacts to Vegetation Communities within the Proposed Project Area, approximately 0.01 acre of coast live oak riparian forest would be temporarily impacted and approximately 0.03 acre would be permanently impacted by the Proposed Project. Total temporary and permanent impacts to the vegetation communities used by SDG&E are crosswalked to the Manual of California Vegetation's Alliances and Associations classification system used by the CDFW to classify sensitive natural communities.

Table 3.5-7: Impacts to Vegetation Communities within the Proposed Project Area

Vegetation Community or Land Cover Type	Approximate Impacts (acres)	
	Temporary	Permanent
Riparian		
Coast Live Oak Riparian Forest	0.01	0.03
Uplands		
Buckwheat Scrub	0.10	0.27
Chaparral	3.47	4.27
Coastal Sage Scrub	4.54	3.00
Coastal Sage Scrub/Chaparral Mix	0.95	0.57
Landscaped/Ornamental	1.31	0.01
Non-Native Grassland	2.19	N/A
Other Cover Types		
Developed	10.94	0.24
Disturbed	19.85	0.08
Bare Ground	6.41	0.16
Total	**49.78**	**8.62**

Note: The summed values may not be equal to the total due to rounding

Direct impacts to riparian habitat or other sensitive natural communities may include temporary and permanent loss of habitat associated with ground-disturbing activities, excavation, and removal of vegetation from these vegetation communities during construction activities. Potential temporary impacts would include areas where vegetation communities overlap with proposed temporary work areas and access roads. Potential permanent impacts include areas where vegetation communities overlap with the permanent footprint associated with individual poles/structures installed along the proposed 230 kV OH segment, proposed 230 kV western UG segment, and proposed 230 kV eastern UG segment.

Construction activities would result in temporary and permanent impacts to approximately 3.47 acres and 4.27 acres of chaparral habitat in the Proposed Project, respectively. This vegetation community may consist of multiple sensitive natural communities defined by the CDFW, including the following:

- *Ceanothus (oliganthus, tomentosus*) Shrubland Alliance - Hairy leaf - woolly leaf ceanothus chaparral (S3),
- *Xylococcus bicolor* Shrubland Alliance - Mission manzanita chaparral (S3),
- *Adenostoma fasciculatum* - *Salvia* spp. Shrubland Alliance - Chamise - Sage chaparral (S4), and
- *Adenostoma fasciculatum* - *Salvia apiana* (S3) Association.

Approximately 4.54 acres and 3.00 acres of coastal sage scrub would be temporarily and permanently impacted by the Proposed Project, respectively. This vegetation community may consist of multiple sensitive natural communities defined by the CDFW, including *Artemisia californica* - (*Salvia leucophylla*) Shrubland Alliance - California sagebrush - (purple sage) scrub (S5) and *Artemisia californica – Eriogonum fasciculatum – Viguiera laciniata* Association(Y). Effects from the removal of riparian habitat and sensitive natural communities would be considered a potentially significant impact on the sensitive natural communities within the Proposed Project.

Indirect impacts to sensitive natural vegetation communities during construction activities may include adverse effects associated with soil compaction, construction-related traffic producing fugitive dust, fuel spills, erosion effects, an increase in ground surface disturbance, and introduction of invasive plant species. Topsoil impacted from grading may contain seeds, bulbs, nutrients, and mycorrhizae that plant species may utilize for survival and for maintaining sustainable colonies in an area. Soil compaction may prevent seeds from germinating, resulting in a decline in population size. Additionally, soil compaction may cause erosion to increase. Increased erosion may bury seedlings and adversely affect plant growth leading to a decline in special-status plant species population size. Fugitive dust generated from ground-disturbing activities could coat the leaves of plants within the vegetation community, thereby reducing photosynthesis and the plants' ability to grow and decrease in the habitat quality of the sensitive natural communities. Potential fuel spills and increased ground disturbance may result in decreased habitat quality for native species. Increased habitat fragmentation and edge effects may result in invasive plant species invading suitable habitat from the edges of Proposed Project work areas, which could result in a reduced area for sensitive natural communities. If invasive plant species proliferate, this may result in an increased risk of wildfire, which could adversely

affect sensitive natural vegetation communities. Effects resulting from indirect impacts would be considered a potentially significant impact.

Impacts to sensitive natural communities are provided in Table 3.5-8: Impacts to Sensitive Natural Communities within the Proposed Project Area. To avoid and minimize potential impacts to these communities from construction activities (e.g., vegetation clearing and grubbing, grading, and earth-moving activities), the boundaries for any sensitive native vegetation and natural community would be delineated as ESAs in accordance with APM BIO-01. All construction activities would occur within delineated work areas, and all fencing would be maintained in working order until completion of construction in accordance with APM BIO-04. Additionally, in accordance with APM BIO-05, a WEAP training would be provided to verify all contractors understand the ESAs, species located in and around the Proposed Project, and the protective measures that would be implemented to protect ESAs. Topsoil, which contains important microbes, nutrients, and seeds for plant species growth and recruitment, may be salvaged from temporarily impacted areas and stored for use during restoration, as practicable, in accordance with APM BIO-02. The introduction of invasive plant species would be managed in accordance with APM BIO-13. All field crews and contractors would coordinate with the qualified biologist to implement preventative BMPs (e.g., biomass removal and vehicle washing) to reduce the introduction of invasive plant species to work areas. Implementation of these practices would decrease the potential for invasive plant species to be introduced and subsequently reduce competition with native plants and sensitive natural communities. All vehicles and equipment maintenance would occur in designated areas located away from aquatic resources.

Table 3.5-8: Impacts to Sensitive Natural Communities within the Proposed Project Area

SDG&E Vegetation Community Proxy	Manual of California Vegetation (MCV) Alliance/Association	Approximate Impacts (acres)	
		Temporary	Permanent
Chaparral	*Ceanothus* (*oliganthus*, *tomentosus*) Shrubland Alliance - Hairy leaf - woolly leaf ceanothus chaparral (S3)	3.47	4.27
	Xylococcus bicolor Shrubland Alliance - Mission manzanita chaparral (S3)		
	Adenostoma fasciculatum - Salvia spp. Shrubland Alliance - Chamise - Sage chaparral (S4) *Adenostoma fasciculatum - Salvia apiana* Association (S3)		
Coastal Sage Scrub	*Artemisia californica - (Salvia leucophylla)* Shrubland Alliance - California sagebrush - (purple sage) scrub (S5) *Artemisia californica – Eriogonum fasciculatum – Viguiera laciniata* Association (Y)	4.54	3.00

Source: Insignia 2026a

Refueling activities would utilize drip pans to prevent fuels or other vehicle fluids from being spilled, and all vehicles would be checked for leaks prior to operation to minimize impacts to sensitive natural communities in accordance with APM BIO-10. Any spills of hazardous fluids

potentially affecting sensitive natural communities would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. Proper dust control measures would be implemented in accordance with applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality, and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality, to reduce indirect impacts to plant species. Potential erosion resulting from soil compaction would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality. With the implementation of these measures, impacts may still result in adverse effects to sensitive natural communities from the removal of riparian, chaparral, and coastal sage scrub vegetation.

The CPUC has prescribed MM BIO-13, which requires mitigation for permanent impacts to upland native vegetation communities if those impacts occur within a Preserve or Proposed Preserve under an existing NCCP/HCP. With the implementation of the APMs and MM BIO-13, the potential impacts to sensitive natural communities would be less than significant with mitigation.

The prescribed MM includes the following:

- **MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities.** If permanent impacts occur within a Preserve or Proposed Preserve, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Operations and Maintenance

Less-than-Significant Impact. O&M activities for the existing Suncrest Substation and proposed 230 kV transmission line would be similar to those currently performed by SDG&E for existing facilities in the area. The Proposed Project would result in a nominal increase in O&M activities, such as increased maintenance and inspection trips. However, O&M activities would occur in existing or new ROWs in previously disturbed areas, would be small in size, and short in duration.

Vehicles used for O&M activities may cause direct crushing of individual plants in sensitive natural communities or disruption of photosynthesis from traffic-related dust. Tree trimming and brush and weed control activities may result in the degradation or destruction of sensitive natural communities. However, these impacts are not anticipated to occur because O&M activities would occur within existing access roads or cleared areas around existing poles where sensitive natural communities have been removed as a result of construction activities. O&M activities would also be limited in size and duration so the exposure of sensitive natural communities to potential impacts would be minimal. Given these factors, impacts to sensitive natural communities during O&M activities would be less than significant.

3.5.4.5.3 Impact BIO-03: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction

Less-than-Significant Impact with Mitigation. As summarized in Section 3.5.2.2 Aquatic Resources, USACE- and RWQCB-jurisdictional aquatic features were mapped within the survey area,[13] pursuant to Sections 404 and 401 of the CWA, respectively. CDFW-jurisdictional features were also mapped within the survey area, pursuant to California Fish and Game Code Section 1600. In total, 107 potentially jurisdictional aquatic features were mapped within the survey area. Potentially jurisdictional aquatic features within the survey area are summarized in Table 3.5-2: Summary of Potentially Jurisdictional Aquatic Features within the Survey Area, and detailed in Section 3.11 Hydrology and Water Quality. The proposed Hospital Staging Yard, the proposed Swat Staging Yard, and the proposed Lyons Valley Staging/Fly Yard were not accessible during the aquatic resources delineation field survey (Insignia 2026b); however, based on a desktop review wetlands are unlikely to be present in these yards (USFWS 2025a). Nonetheless, prior to ground disturbance or vegetation-clearing activities, SDG&E would implement APM HYD-03 to assess the potential for potential jurisdictional aquatic features within work areas that were not previously surveyed.

No direct impacts to jurisdictional aquatic features are anticipated as the Proposed Project components have been sited and designed to avoid direct impacts to them and their hydrology. This has included the use of trenchless crossing methods or by spanning these aquatic features. While direct impacts would be avoided, the potential for indirect impacts to aquatic features still exists. Indirect impacts may be caused by potential erosion from ground-disturbing activities and the discharge of pollutants from construction workspaces and access roads, which may result in degradation of the water quality and natural hydrology of these features. SDG&E would implement the APMs included in Section 3.11 Hydrology and Water Quality to avoid and minimize potential impacts to jurisdictional aquatic features. In addition, SDG&E would implement APMs BIO-01, BIO-04, BIO-05, and BIO-10 to verify that construction workers are aware of ESAs, that any sensitive areas within workspaces would be clearly marked, and that construction activities and refueling would be limited to marked workspaces. SDG&E would also comply with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality regarding spill prevention and control for all phases of construction.

With the avoidance of construction activities within jurisdictional waters, other regulatory approvals from the USACE, RWQCB, and/or the CDFW for impacts to waters are not anticipated to be required for the Proposed Project. However, if jurisdictional features are identified prior to construction within areas that have not been previously surveyed and would be potentially impacted by the Proposed Project, then SDG&E may be required to obtain a Section 404 Nationwide Permit from the USACE, a Water Quality Certification and/or Waste Discharge Requirement from the RWQCB, and/or a Section 1602 LSAA from the CDFW. SDG&E would

[13] As depicted in Attachment 3.5-B: Aquatic Resources within the Survey Area, portions of the survey area were inaccessible. As a result, additional jurisdictional features may exist in the survey area.

be required to comply with all conditions of the permits and authorizations for the Proposed Project.

While impacts to known aquatic features or riparian habitats are not anticipated, the CPUC has prescribed MM BIO-14, which requires that SDG&E mitigate for any impacts to wetlands and riparian habitats. With the implementation of APMs BIO-01, BIO-04, BIO-05, BIO-10, HYD-01, HYD-02, and HYD-03, and MM BIO-14, the potential impacts to wetlands and riparian habitats near the Proposed Project would be less than significant.

The prescribed MM includes the following:

- **MM BIO-14. Mitigate for Permanent Impacts to Wetlands and Waters of the U.S. and the State.** If permanent impacts occur to jurisdictional aquatic resources, SDG&E would mitigate for impacts at a minimum 1:1 ratio or in accordance with landowner or resource agency agreements, permits, and policies.

Operations and Maintenance

Less-than-Significant Impact. O&M activities for the Proposed Project would generally avoid jurisdictional aquatic features but could indirectly impact them through erosion or the introduction of pollutant discharges. However, typical O&M activities would be similar to those occurring on other nearby transmission lines and would not be anticipated to result in substantial water quality degradation. O&M materials would be applied, stored, and disposed of with appropriate containment in a manner consistent with manufacturer recommendations and in accordance with relevant regulations. Additional ground disturbance is not anticipated during O&M, and the Proposed Project components would not include planned or routine discharges of potential water pollutants. Should any O&M activities be required within jurisdictional waters or for additional discharges, necessary permits and authorizations would be obtained prior to conducting O&M activities in jurisdictional waters as discussed in Section 3.11 Hydrology and Water Quality. Further O&M activities would occur in existing or new ROWs and would be small in size and short in duration and occur primarily within previously disturbed areas. O&M activities at the existing Suncrest Substation would involve routine inspections and equipment maintenance similar to the current O&M activities occurring within the limits of the existing Suncrest Substation and would be unlikely to indirectly impact adjacent aquatic features. Given these factors, impacts to potentially jurisdictional waters would be less than significant.

3.5.4.5.4 Impact BIO-04: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Construction

Less-than-Significant Impact. As discussed in Section 3.5.2.5 Regional Wildlife Corridors, the Proposed Project Area would overlap multiple wildlife corridor areas, including Natural Landscape Blocks along the proposed 230 kV western and eastern UG segments and along the proposed 230 kV OH segment in the eastern portion of the survey area. The Pacific Flyway overlaps the entirety of the Proposed Project. The Proposed Project Area overlaps riparian corridors in small areas throughout the Proposed Project. The Proposed Project Area would also

occur near Loveland Reservoir, which is used by many waterfowl and wading birds. No wildlife nursery sites are located within the Proposed Project Area.

Significant impacts to wildlife movement may occur if a wildlife movement corridor were to be interrupted by a feature that physically blocks wildlife movement (e.g., a roadway or a wall), or if suitable habitat that supports wildlife in the movement corridor were to be directly removed during construction or impacted in a way that reduces the habitat quality of the movement corridor or is indirectly affected by construction noise or dust. Direct impacts from construction activities associated with the Proposed Project may be caused by vegetation removal, installation of permanent infrastructure (e.g., poles and transmission line), and excavation that may change the condition of the wildlife corridor.

For migratory birds that use the Pacific Flyway, the proposed 230 kV OH segment could intersect their north-south movement during the migratory seasons. However, the Proposed Project Area crosses a small portion of the Pacific Flyway and migratory birds would only be within the Proposed Project Area for a short period before continuing their migration and would have ample space to avoid the proposed 230 kV OH segment. Resident birds would likely be able to avoid the Proposed Project Area where construction is occurring by moving through adjacent habitats.

The use of helicopters during construction may also reduce the quality of this wildlife corridor if used during times of year when birds migrate. Additionally, the presence of electrified transmission lines may also cause electrocution and death of individual birds. For waterfowl and wading birds that use Loveland Reservoir, the Proposed Project Area may also form a barrier and interfere with north-south movement to other waterbodies. However, the proposed 230 kV OH segment would be located north of the reservoir, which would reduce impacts to species that inhabit the reservoir and are likely to move south to the nearest IBA south of the Proposed Project Area and within the San Diego National Wildlife Refuge. Additionally, there is an existing 69 kV transmission line that runs parallel to the Proposed Project Area in the area north of Loveland Reservoir. Species within Loveland Reservoir are already accustomed to the existing infrastructure, and the Proposed Project would be sited near the existing infrastructure to minimize impacts to wildlife habitat and movement corridors within this area. However, due to the potential alteration of wildlife corridors and increased risk of injury and/or mortality to wildlife species during movement and migratory routes from Proposed Project activities, direct impacts would be considered potentially significant.

Indirect impacts from construction activities may be caused by noise from construction equipment, noise from construction workers, dust that settles on plants within the corridor, or perches created by the permanent infrastructure that may allow raptors to prey on certain other wildlife. This increased risk of predation may deter some wildlife species from moving across portions of the proposed 230 kV OH segment. Indirect impacts may lead to disruption or deterrence of wildlife use of the corridor for various native and special-status species near and around the Proposed Project Area. As a result, indirect impacts to wildlife corridors and/or the movement of wildlife species would be considered potentially significant.

Direct and indirect impacts would be avoided and minimized by implementing a variety of APMs. For wildlife species that may use riparian corridors, the Proposed Project would be sited

to avoid riparian corridor areas and aquatic features to the maximum extent practicable. The Proposed Project Area would not create a barrier for species movement within riparian corridors and would have nominal indirect impacts within these corridors. SDG&E would also implement APM BIO-17 and design the proposed 230 kV transmission lines and other Proposed Project components in compliance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 to minimize impacts to migratory birds and the risk of increased predation from raptors due to increased perching opportunities. SDG&E would implement APM BIO-05 to train workers about ESAs within the Proposed Project Area and to conduct construction in a manner that avoids and minimizes impacts on riparian movement corridors. Sensitive resources would be delineated and avoided to the extent practicable in accordance with APM BIO-01, and construction activities within suitable habitat for special-status species would require monitoring by a qualified biologist per APM BIO-03. All tree trimming would adhere to APM BIO-14 to schedule activities in the non-sensitive times of year. Dust would be minimized in accordance with the applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality, and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality, which would minimize dust from settling onto vegetation. Construction noise that could contribute to increased wildlife stress and decreased suitability of habitat would be restricted to a set schedule, in accordance with APM NOI-01 as described in Section 3.14 Noise.

For wildlife species that use areas of coastal sage scrub and chaparral habitats, both temporary and permanent impacts would occur within these suitable habitats during construction, which may degrade the quality of this habitat and the use of these areas as a migratory corridor. However, the temporary and permanent impact areas would have a small footprint within the overall coastal sage scrub and chaparral habitats available within the Proposed Project Area and adjacent areas. As a result, species would be able to avoid impact areas and continue moving across the landscape. Furthermore, the temporary impacts to wildlife corridors, including excavations, would be restored in accordance with APM BIO-02. With the implementation of these measures outlined in Section 3.5.4.2 Applicant-Proposed Measures and Best Management Practices, direct and indirect impacts to wildlife corridors or the movement of native resident or migratory fish or wildlife species would be reduced to less than significant. Similarly, the permanent and temporal loss of suitable habitat for wildlife corridors associated with construction work areas would be considered less than significant because these areas are relatively small and would not be expected to deter wildlife movement.

Operations and Maintenance

Less-than-Significant Impact. O&M activities for the Proposed Project would be similar to the O&M activities currently performed by SDG&E for existing facilities in the area. Therefore, the Proposed Project would result in a nominal increase in O&M activities, such as increased maintenance and inspection trips. Wildlife corridors would be temporarily impacted during O&M activities, but wildlife could use the adjacent habitat to transit between habitat areas during O&M activities and return to using the full corridor following completion of the given O&M activity. O&M activities would occur in existing or new ROWs and would be small in size and short in duration. Given the limited nature of these continuing operations and that O&M activities would occur within previously disturbed areas, potential impacts to wildlife movement or established corridors would be less than significant. However, for migratory birds that use the

Pacific Flyway, the operation of the proposed 230 kV OH segment may increase the collision risk of birds during their north-south movement during the migratory seasons. Resident birds would likely be able to avoid the transmission lines and structures. SDG&E would implement APM BIO-17 during the Proposed Project design phase to be consistent with APLIC design recommendations. As a result, potential collision or electrocution risks to birds and bats would be less than significant.

3.5.4.5.5 Impact BIO-05: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction, Operations and Maintenance

No Impact. The Proposed Project is located within the City of El Cajon and San Diego County. Based on a review of the local regulations relating to biological resources, the Proposed Project would not conflict with local policies or ordinances protecting biological resources, which includes the City of El Cajon General Plan, San Diego County General Plan, and the County of San Diego Biological Mitigation Ordinance (County of San Diego 2010), as detailed in Attachment 3.5-I: Local Policies and Ordinances Consistency Analysis. The Proposed Project would be designed in a way that complies with local policies pertaining to wildlife and plants. Therefore, no impact would occur. An assessment of the potential conflict of the Proposed Project with the provisions of the City of El Cajon and the County of San Diego Subarea Plan components of the San Diego MSCP Plan (NCCP/HCP) are discussed in Section 3.5.4.5.6 Impact BIO-06: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?.

3.5.4.5.6 Impact BIO-06: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Construction, Operations and Maintenance

As shown in Figure 3.5-3: Special Habitat Management Areas within the Vicinity of the Proposed Project Area, the Proposed Project overlaps with the planning boundaries for multiple HCPs/NCCPs—the SDCWA Subregional NCCP/HCP, San Diego County MSCP and associated subarea plans, the SDG&E Subregional Plan, the SDG&E HCP Amendment, the SDG&E LEHCP, and the SDG&E Subregional Plan NCCP Amendment for Wildfire Safety Activities. Some of these plans have subarea plans and/or associated habitat management and monitoring plans associated with them. All of these plans were developed to reduce impacts to special-status species through required avoidance and minimization measures and guide conservation and restoration within the planning areas at a programmatic level. Additionally, SDG&E has two HCPs—the HCP Amendment and Quino LEHCP—and one NCCP—SDG&E Subregional Plan Wildfire Amendment—that overlap the Proposed Project, but are not shown on the map, as they overlap the planning boundaries for the SDG&E Subregional Plan. An analysis of potential conflicts of the Proposed Project with the implementation of each plan is provided in the subsections that follow. Permanent impacts from the Proposed Project to Preserve or Proposed

Preserve areas within an established HCP/NCCP plan could have a potentially significant impact or conflict with the provisions of the established plan.

San Diego County Water Authority Subregional NCCP/HCP

Less-than-Significant Impact with Mitigation. The SDCWA NCCP/HCP was developed to protect natural resources within the jurisdiction of the Water Authority and to minimize and avoid impacts that may result from activities conducted by the Water Authority (e.g., new water transmission infrastructure, storage, treatment) within lands owned by the Water Authority. Additionally, the NCCP/HCP requires the establishment of a network of Preserve areas, both existing and planned, that are necessary to mitigate for Water Authority project impacts. While SDG&E would not seek coverage for the Proposed Project or be required to comply with the conditions of this NCCP/HCP, the Proposed Project would occur within the planning boundary for this NCCP/HCP. The eastern edge of the planning area occurs between Poles 20 and 21, as depicted on Map 6 in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area, and would encompass the entirety of the 230 kV western UG segment and the western portion of the proposed 230 kV overhead segment transmission line.

Construction and O&M activities associated with the Proposed Project would be limited to relatively small portions of the NCCP/HCP planning area and would impact buckwheat scrub, coastal sage scrub, coastal sage scrub/chaparral mix, chaparral, landscaped/ornamental, and disturbed habitats; and bare ground and developed land covers. The Proposed Project would result in both temporary and permanent impacts within Preserve areas (e.g., the portion of the Crestridge Ecological Reserve originally owned by the SDCWA and transferred to the CDFW) included in this NCCP/HCP. The anticipated impacts to the Crestridge Ecological Reserve are detailed in Table 3.5-9: Impacts to Vegetation Communities and Land Covers within Crestridge Ecological Reserve. Although the Proposed Project is generally located within existing unpaved roads and disturbed areas within the Crestridge Ecological Reserve, a small portion of the 230 kV western UG segment would cross coastal sage scrub habitat and temporary workspaces associated with existing overhead infrastructure would overlap coastal sage scrub habitat. Impacts within bare ground land cover occur within unpaved access roads and permanently cleared areas around existing infrastructure. Impacts within developed land cover primarily occur within a paved driveway. Impacts to disturbed habitat which occurs along these paved and unpaved roads are also anticipated. Impacts to bare ground, developed, and disturbed cover types constitute approximately 56 percent of the total impacts within Crestridge Ecological Reserve.

Permanent and temporary impacts within the Crestridge Ecological Reserve would be relatively small but could have a potentially significant impact on the Crestridge Ecological Reserve and implementation of the Habitat Management and Monitoring Plan. The Proposed Project has been sited and designed to locate infrastructure within land cover types that do not contain native vegetation to the extent feasible. This would avoid and minimize habitat and species impacts within the Crestridge Ecological Reserve. SDG&E would implement APM BIO-02 to restore temporary impacts to habitat, and/or SDG&E would mitigate for the permanent impacts within the Crestridge Ecological Reserve in accordance with MM BIO-13. Additionally, the CPUC has prescribed MM BIO-15, which requires SDG&E to coordinate the Proposed Project with the CDFW (i.e., the Preserve manager of the Crestridge Ecological Reserve) in order to identify and coordinate measures for minimizing construction impacts on the Preserve and on the

implementation of the land management, monitoring, and maintenance activities of the Crestridge Ecological Reserve Habitat Management and Monitoring Plan. Therefore, the potential impact from the Proposed Project on Preserves and Proposed Preserves within this NCCP/HCP would be reduced to be less than significant with mitigation. The Proposed Project would not conflict with the provisions of the NCCP/HCP or management of the Crestridge Ecological Reserve because the construction activities would be coordinated with the CDFW to minimize impacts within the Preserve and minimize disruption of planned activities by the CDFW while also allowing SDG&E to meet the service requirements for developing areas near the Proposed Project.

Table 3.5-9: Impacts to Vegetation Communities and Land Covers within Crestridge Ecological Reserve

Vegetation Community or Land Cover Type	Temporary Impacts (acres)	Permanent Impacts (acres)
Uplands		
Coastal Sage Scrub	1.05	0.01
Other Cover Types		
Bare Ground	0.36	0.00
Developed	0.67	0.03
Disturbed	0.34	0.01
Landscaped/Ornamental	0.01	0.00
Total	**2.44**	**0.04**

Note: The summed values may not be equal to the total due to rounding.

The prescribed MM includes the following:

- **MM BIO-15. Coordination with Preserve or Proposed Preserve Managers.** In Preserve or Proposed Preserve areas, SDG&E would coordinate with the appropriate Preserve manager (if applicable) to plan and construct the Proposed Project in a manner that avoids and minimizes impacts to the Preserve or Proposed Preserve, to the extent feasible, while also not impairing SDG&E's ability to meet the service demand and public utility responsibilities.

San Diego Multiple Species Conservation Program Plan (NCCP/HCP)

As discussed in Section 3.5.3.3.3 Habitat Conservation and Management Plans, the San Diego MSCP NCCP/HCP includes many subareas plans that together constitute the San Diego MSCP Plan to ensure that the goals and requirements of the MSCP and the established Preserve system are achieved. SDG&E is not seeking coverage for the Proposed Project through the MSCP Plan and subarea plans, but the subsections that follow evaluate whether the Proposed Project would conflict with the provisions and implementation of any of the subarea plans.

City of El Cajon Subarea Plan

No Impact. The City of El Cajon is still in the process of preparing the El Cajon Subarea Plan and information is not publicly available regarding the specific subarea plan boundary or timing for approval. The proposed Hospital Staging Yard is located within the City of El Cajon and may be included within the El Cajon Subarea Plan planning boundary. However, the Hospital Staging Yard would be a temporary staging yard located on landscaped/ornamental and disturbed habitat and developed and bare ground land covers. Because the El Cajon Subarea Plan has not been approved, the Proposed Project would be considered part of the existing conditions and have no impact on the planning or potential Preserve assembly for the El Cajon Subarea Plan.

City of La Mesa Subarea Plan

No Impact. Although the City of La Mesa Subarea Plan planning boundary is located within 5 miles of the Proposed Project, no Proposed Project components would occur within the planning area. Therefore, the Proposed Project would not conflict with the City of La Mesa Subarea Plan or implementation by the City of La Mesa, and no impact would occur.

City of Santee Subarea Plan

No Impact. Although the City of Santee Subarea Plan planning boundary for the Draft City of Santee Subarea Plan is located within 5 miles of the Proposed Project, no Proposed Project components would occur within the planning area or offsite conservation areas planned for Hermes copper butterfly and Quino checkerspot butterfly as part of the proposed plan. Therefore, the Proposed Project would not conflict with this City of Santee Subarea Plan, and no impact would occur.

City of San Diego Subarea Plan

No Impact. Although the boundary for the City of San Diego occurs within 5 miles of the Proposed Project, none of the Proposed Project components occur within the planning area boundary for this subarea plan. Further, the portion of the Eastern Area of the City of San Diego Subarea Plan that occurs within 5 miles of the Proposed Project includes well developed areas and no conserved vegetation communities occur within 5 miles of the Proposed Project. Therefore, the Proposed Project would not conflict with this City of Santee Subarea Plan, and no impact would occur.

County of San Diego Subarea Plans

South County Multiple Species Conservation Program Subarea Plan

Less-than-Significant Impact with Mitigation. The eastern edge of the South County Subarea Plan planning boundary occurs between Poles 20 and 21, as depicted on Map 6 in Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area, and would encompass the entirety of the 230 kV western UG segment, the Hospital and Greenfield Staging Yards, and the western portion of the proposed 230 kV OH segment transmission line. All areas of the Proposed Project within the South County Subarea Plan are within the Preserve lands that have been pre-approved as mitigation areas associated with the South County Subarea Plan activities.

Most of the Proposed Project components that occur within these Preserve lands would be temporary workspaces that may result in direct impacts to species and suitable habitat areas within the Preserve or Proposed Preserve caused by potential vehicle strikes during construction; removal of vegetation within suitable habitat areas during construction; the permanent conversion of potentially suitable habitat for various species; and the temporary disturbance of habitat potentially suitable vegetation removal and ground disturbing activities and may cause potentially significant impacts within the Preserve lands. Additionally, some direct permanent impacts would occur within Preserves or Proposed Preserves from the installation of the Poles 1-A through 21 and electric infrastructure within the Preserve system covered by this subarea plan. The permanent footprint is anticipated to include only the footprint around the permanent infrastructure and is relatively small compared to the overall size of the Preserves and Proposed Preserves. Installation of the permanent infrastructure within Preserves or Proposed Preserves could adversely affect the species and habitat within the Preserve lands and result in potentially significant impacts through the permanent loss of habitat for special-status species.

Indirect impacts to species and habitat within Preserves or Proposed Preserves during construction may include decreased suitability of habitat in the vicinity of the Proposed Project caused by factors, such as increased noise from construction activities, nighttime lighting installed within work areas, and increased human activity. These impacts could result in disruption of typical behaviors for special-status species, such as breeding and foraging, increased risk of predation, or temporal loss of habitat and increase habitat fragmentation and edge effects. Some species may be more tolerant of indirect impacts than others. Depending upon the species present within the Preserve or Proposed Preserve, indirect impacts may be potentially significant.

APM BIO-01 and BIO-03 through BIO-05 would verify that ESAs would be avoided. A qualified biologist would be present during any activities within suitable habitat for special-status species, all construction activities would be confined to delineated work areas, and that all contractors and personnel would receive training on the identification of sensitive resources and contact information for key personnel. Additionally, all temporary impact areas would be restored following construction in accordance with APM BIO-02. With the implementation of these APMs, potential impacts associated with temporary workspaces would be reduced to less than significant. However, the permanent loss of habitat on HCP covered species would be potentially significant. In accordance with MMs BIO-02, BIO-07, BIO-11, and BIO-13, SDG&E would mitigate for permanent impacts to habitat and to special-status species within Preserves or Proposed Preserves. With implementation of the APMs and MMs, the potential impacts from the Proposed Project would be reduced to less than significant with mitigation and would not conflict with the provisions and implementation of the South County Subarea Plan.

East County Multiple Species Conservation Program Subarea Plan

No Impact. The East County Subarea Plan is currently under development and has not been approved by the USFWS or CDFW. The list of covered activities and covered species is still being developed, and planning for the potential Preserve areas is still being conducted. The Proposed Project would be considered part of the existing conditions evaluated as the subarea plan is being developed. Therefore, the Proposed Project would not conflict with this subarea plan, and no impact would occur.

San Diego Gas & Electric Company 1995 Subregional Natural Community Conservation Plan/Habitat Conservation Plan

No Impact. All Proposed Project components occur within the SDG&E Subregional Plan NCCP/HCP plan area. The Subregional Plan HCP has further been amended, and compliance with the HCP Amendment and the Subregional NCCP Amendment for Wildfire Safety Activities is discussed in the following subsections. SDG&E and the CDFW are currently in the process of amending the Subregional NCCP; however, the long-term major amendment has not yet been approved and the SDG&E Subregional NCCP is still the approved NCCP, but no longer has any available acreage or take coverage. The Subregional HCP/NCCP is no longer used; therefore, the Proposed Project would not conflict with the provisions of this plan. Any future amendments to this plan would incorporate the Proposed Project as part of the existing conditions evaluated at the time the plan is amended and no impact would occur.

San Diego Gas & Electric Company Habitat Conservation Plan Amendment

Less-than-Significant Impact with Mitigation. All Proposed Project components occur within the 2023 SDG&E HCP Amendment plan area. Since completing the amendment process, SDG&E has implemented the 2023 HCP Amendment to conduct covered activities (primarily O&M activities); however, a new project of similar scope and scale as the Proposed Project has not yet been constructed under the 2023 HCP Amendment. SDG&E may propose an amendment to the 2023 HCP Amendment to include the Proposed Project for potential take coverage under an additional amendment to the 2023 HCP Amendment in coordination with the USFWS or seek other project-specific authorizations for the Proposed Project to comply with the FESA. The CPUC has prescribed MMs, including mitigation for impacts to Preserves or Proposed Preserves and special-status species, that align with the 2023 SDG&E HCP Amendment requirements in the event that the 2023 HCP Amendment is not amended again and cannot be relied on for mitigation. Potential impacts and calculated mitigation as a result of the Proposed Project and in accordance with the 2023 HCP Amendment are detailed in the following paragraphs.

The Proposed Project would result in direct and indirect impacts to species and suitable habitat that occur within Preserve or Proposed Preserve areas that are covered by other HCPs/NCCPs. These temporary impacts may be avoided or minimized through implementation of APMs such that impacts to species and habitat within Preserve or Proposed Preserve areas would be less than significant; however, the permanent loss of suitable habitat within Preserves or Proposed Preserves would be unavoidable and potentially significant. The total temporary and permanent impacts to vegetation communities and land covers as a result of the Proposed Project as well as their comparison with the authorized impact caps allowed under the 2023 HCP Amendment are detailed in Table 3.5-10: Impacts to Vegetation Communities and Land Covers within the Proposed Project Area. Additionally, the total temporary and permanent impacts to vegetation communities inside and outside of Preserves or Proposed Preserves are detailed in Table 3.5-11: Impacts to Preserves or Proposed Preserves. The total temporary and permanent impacts to covered species' tracked habitat[14] covered by the 2023 HCP Amendment are detailed in

[14] Tracked habitat is defined as modeled habitat or unmodeled habitat that is assumed or observed to be suitable habitat for or occupied by a covered species and would be used to track covered species habitat impacts (SDG&E 2023). Tracked habitats are assumed to be occupied, unless further protocol-level surveys are completed and indicate that a portion of the tracked habitat does not constitute occupied habitat.

Table 3.5-12: Impacts to Covered (Tracked) Species Habitat. For the purposes of determining mitigation requirements for unavoidable permanent impacts to special-status species, potentially suitable habitat areas for each species were determined, as described in Section 3.5.4.1 Analysis Methodology. The habitat and species-specific impact acreages were used to calculate the total mitigation acreages for both habitat and species-specific mitigation that SDG&E would provide to compensate for impacts from the Proposed Project, as detailed in Table 3.5-13: Mitigation Totals.

To provide safe, reliable, efficient, and cost-effective electric service to its customers, the Proposed Project would cross Preserves and/or Proposed Preserves covered by other habitat conservation or management plans. The Proposed Project would also cross habitat for arroyo toad, Hermes copper butterfly, and southwestern pond turtle, which would all require an amendment to the 2023 HCP Amendment if SDG&E plans to use the 2023 HCP Amendment to cover take associated with the Proposed Project. To avoid and minimize impacts to 2023 HCP Amendment covered species and their habitat, SDG&E would be required to implement the APMs and MMs—including the species-specific protocols in MMs BIO-03 through BIO-06 and BIO-12—during construction and O&M activities for the Proposed Project. As feasible, SDG&E would restore temporarily impacted habitat as required in APM BIO-02 and similar to the process described in Section 5.2 of the 2023 HCP Amendment. For permanent impacts, the CPUC has prescribed MMs BIO-02, BIO-07, and BIO-13 to compensate for impacts within the 2023 HCP Amendment plan area and in compliance with the plan. The MMs include compensatory mitigation for potential impacts within Preserves and Proposed Preserves, including the Crestridge Ecological Reserve, Sweetwater Authority-owned conservation lands, other privately owned conservation lands, and Endangered Habitats Conservancy-managed conservation lands. These measures were designed to be consistent with the 2023 HCP Amendment. Therefore, the potential impacts from construction of the Proposed Project would be less than significant with mitigation and would not conflict with the provisions and implementation of the 2023 HCP Amendment.

O&M activities are anticipated to be small in size, spread out over time, and distributed across large areas. Further O&M activities would occur in existing or new ROWs and in previously disturbed areas. In the unlikely event that impacts to covered species or their habitat occur as a result of O&M activities, then SDG&E would amend the 2023 HCP Amendment or comply with project-specific permits as appropriate. Therefore, the potential impacts from O&M activities would be less than significant and would not conflict with the provisions and implementation of the 2023 HCP Amendment.

Table 3.5-10: Impacts to Vegetation Communities and Land Covers within the Proposed Project Area

HCP Amendment Habitat Classification	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)	HCP Amendment Temporary Impact Cap (acres)[15]	HCP Amendment New Construction Permanent Impact Cap (acres)[16]
Habitats Requiring Mitigation under the HCP Amendment				
Buckwheat Scrub	0.10	0.27	56.65	17.95
Chaparral	3.47	4.27	33.04	13.37
Coast Live Oak Riparian Forest	0.01	0.03	1.63	0.34
Coastal Sage Scrub	4.54	3.00	56.65	17.95
Coastal Sage/Chaparral Mix	0.95	0.57	33.04	13.37
Non-Native Grassland	2.19	0.00	123.96	30.17
Habitats/Land Covers Not Requiring Mitigation under the HCP Amendment				
Bare Ground	6.41	0.16	N/A	N/A
Developed	10.94	0.24	N/A	N/A
Disturbed	19.85	0.08	N/A	N/A
Landscaped/Ornamental	1.31	0.01	N/A	N/A
Total	**49.78**	**8.62**	N/A	N/A

Note: SDG&E may not choose to amend the HCP Amendment to include the Proposed Project, but the totals in this table provide the anticipated impacts in relation to the authorized impact cap number. The summed values may not be equal to the total due to rounding.

[15] This column is based on the "Total Temporary Impacts through 2050" column of Table 4.6 of the SDG&E HCP Amendment (SDG&E 2023).

[16] This column is based on the "New Construction Permanent Impacts through 2050" column of Table 4.5 of the SDG&E HCP Amendment (SDG&E 2023).

Table 3.5-11: Impacts to Preserves or Proposed Preserves within the Proposed Project Area

HCP Amendment Habitat Classification	Outside Preserve or Proposed Preserve[17]		Inside Preserve or Proposed Preserve[18]	
	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
Habitats Requiring Mitigation under the HCP Amendment				
Buckwheat Scrub	0.00	0.00	0.10	0.27
Chaparral	0.36	0.30	3.11	3.97
Coast Live Oak Riparian Forest	0.00	0.00	0.01	0.03
Coastal Sage Scrub	1.48	2.28	3.05	0.72
Coastal Sage/Chaparral Mix	0.14	0.03	0.81	0.54
Non-Native Grassland	0.00	0.00	2.19	0.00
Habitats/Land Covers Not Requiring Mitigation under the HCP Amendment				
Bare Ground	0.75	0.03	5.67	0.13
Developed	6.14	0.06	4.81	0.18
Disturbed	14.86	0.05	4.99	0.03
Landscaped/Ornamental	1.13	0.01	0.18	0.00
Total	**24.86**	**2.76**	**24.92**	**5.86**

[17] Permanent impacts within the HCP Amendment plan area, but outside the Preserves or Proposed Preserves would be mitigated at a one-to-one ratio.
[18] Permanent impacts within Preserves or Proposed Preserves would be mitigated at a two-to-one ratio.

Table 3.5-12: Impacts to Covered (Tracked) Species Habitat within the Proposed Project Area

Species Name	Approximate Temporary Impacts to Tracked Habitat (acres)	Approximate Permanent Impacts to Tracked Habitat (acres)	Approximate Total Impacts to Tracked Habitat (acres)	HCP Amendment Total Impact Cap (acres)[19]	HCP Amendment New Construction Impact Cap (acres)[20]
Arroyo toad (non-breeding upland)	0.19	0.44	0.63	390.03	64.74
Coast horned lizard	11.25	8.11	19.36	212.86	35.33
Coastal California gnatcatcher	4.64	3.27	7.91	60.26	10.00
Hermes copper butterfly	9.10	8.11	17.17	148.85	24.71
Least Bell's vireo	0.03	0.05	0.08	14.71	2.44
Southwestern pond turtle (upland)	0.03	0.05	0.08	19.36	3.21
Western spadefoot (upland)	8.59	3.90	12.49	303.36	50.36

[19] This column is based on the "Total O&M and New Construction Impacts through 2050" column of Table 4.4 of the SDG&E HCP Amendment (SDG&E 2023).

[20] This column is based on the "New Construction Impacts through 2050" column of Table 4.4 of the SDG&E HCP Amendment (SDG&E 2023).

Table 3.5-13: Mitigation Totals

Habitat/Species	Approximate Mitigation Area (acres)[21]
Habitat	
Buckwheat Scrub	0.55
Chaparral	8.23
Coast Live Oak Riparian Forest	0.09
Coastal Sage Scrub	3.72
Coastal Sage Scrub/Chaparral Mix	0.03
Non-Native Grassland (mitigable)	0.00
Species	
Arroyo toad (non-breeding upland)	0.88
Coastal California gnatcatcher	4.26
Hermes copper butterfly	13.60
Least Bell's vireo	0.09
Southwestern pond turtle (upland)	0.10
Western spadefoot (upland)	7.33

Note: Mitigation areas were calculated using SDG&E's pre-activity survey report workbook that includes the required formulas and mitigation ratios consistent with the HCP Amendment and required MMs in this section. It is assumed that temporary impacts would be restored pursuant to the Project HRP and entered into SDG&E's restoration program.

[21] As a conservative estimate of mitigation, all temporary impacts were assumed to be permanent impact areas.

San Diego Gas & Electric Company Subregional Natural Community Conservation Plan Amendment for Wildfire Safety Activities

No Impact. The SDG&E Subregional NCCP Amendment for Wildfire Safety Activities covers the Proposed Project area. SDG&E would not seek coverage for the Proposed Project activities under this amendment as this amendment is specifically focused on wildfire safety activities and does not cover new construction such as the Proposed Project. However, existing SDG&E infrastructure is present along portions of the Proposed Project alignment, which may be maintained as part of the covered activities for this amendment during construction and O&M activities for the Proposed Project. SDG&E is responsible for implementing the Subregional NCCP Amendment and can schedule the Proposed Project and the Subregional NCCP Amendment covered activities in a manner that does not result in any conflicts between the activities. The Proposed Project includes the avoidance and minimization measures consistent with the original Subregional NCCP and the CPUC has prescribed species-specific and habitat MMs for the Proposed Project that are consistent with the Subregional NCCP Amendment. Therefore, the Proposed Project would not conflict with the implementation of the Subregional Plan NCCP Amendment.

San Diego Gas & Electric Company Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly

Less-than-Significant Impact with Mitigation. All Proposed Project components occur within the Quino LEHCP area, and some Proposed Project components overlap with specific Quino Mapped Areas included in the Quino LEHCP. SDG&E does not anticipate seeking potential take coverage for Quino checkerspot butterfly and its habitat for the Proposed Project under the Quino LEHCP, because the acres of impacts allowed under the Quino LEHCP would not be sufficient to construct the Proposed Project. SDG&E anticipates seeking take coverage for impacts to this species through a project-specific HCP. Nonetheless, the Quino LEHCP includes measures that avoid and minimize impacts to the Quino checkerspot butterfly. The applicable measures from the Quino LEHCP have been incorporated into the Proposed Project as APMs to minimize impacts to Quino checkerspot butterfly. The CPUC has also prescribed MMs, including mitigation for impacts to Quino checkerspot butterfly in MM BIO-08 and MM BIO-09, that align with the Quino LEHCP requirements. Potential impacts and calculated mitigation as a result of the Proposed Project and in accordance with the Quino LEHCP are detailed in the following paragraphs.

While Quino checkerspot butterfly would mainly be avoided, adverse impacts would occur within suitable habitat during construction activities. MM BIO-08 would be implemented to avoid and minimize impacts to Quino checkerspot butterfly and suitable habitat. The total unavoidable temporary and permanent impacts from the Proposed Project during construction within Quino Mapped Areas[22] in the Quino LEHCP are detailed in Table 3.5-14: Impacts to Quino Checkerspot Suitable Habitat within the Proposed Project Area within the Quino Mapped Area. For the Proposed Project to be consistent with the Quino LEHCP, SDG&E would need to mitigate for both temporary and permanent impacts to suitable and occupied habitat, even though

[22] Quino Mapped Areas included in the Quino LEHCP and within suitable habitat areas were used as a proxy for occupied habitat, until such a time that protocol-level surveys can be completed to further identify suitable and occupied habitat areas for the species.

SDG&E would conduct restoration for temporary impacts required in APM BIO-02. The Proposed Project is anticipated to impact approximately 2.38 acres of suitable habitat for Quino checkerspot butterfly and could have a potentially significant impact on this species. Additionally, the CPUC has prescribed MM BIO-09 to verify that impacts to Quino checkerspot butterfly are fully mitigated and that these measures align with the Quino LEHCP. Therefore, the potential impacts to the Quino checkerspot butterfly and their suitable habitat from construction activities would be less than significant with mitigation and the Proposed Project would not conflict with the provisions and implementation of the Quino LEHCP.

Table 3.5-14: Impacts to Quino Checkerspot Suitable Habitat within the Proposed Project Area within the Quino Mapped Areas

Vegetation Community	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)
Chaparral	0.09	0.00
Coastal Sage Scrub	0.99	1.21
Coastal Sage/Chaparral Mix	0.05	0.04
Total	**1.13**	**1.25**

Because O&M activities are anticipated to be small in size, spread out over time, and spread over large areas, these activities could potentially be covered under the Quino LEHCP. Regardless of whether SDG&E uses the Quino LEHCP for take coverage for O&M activities, or seeks a project-specific HCP for O&M activities, the CPUC has prescribed MMs consistent with the Quino LEHCP so that the Proposed Project does not conflict with the provisions of this plan. Therefore, the potential impacts from O&M activities would be less than significant and would not conflict with the provisions and implementation of the Quino LEHCP.

Southern California National Forests Land Management Plan – Part 2 Cleveland National Forest Strategy

Less-than-Significant Impact with Mitigation. The Proposed Project would occur within the Sweetwater Place geographical unit of the CNF LMP, which does contain some RCAs that occur within the Proposed Project Area. A total of 24 USFSS plant species and 16 USFSS wildlife species were present or have a moderate or high potential to occur within the portion of the survey area on the CNF. The CNF LMP is permissive of activities, such as allowing utility corridors in some designated areas, unless the plan states that specific activities cannot occur in an area. Most ground-disturbing activities require further project- or site-specific analysis before a decision is made by the USFS on whether the use of the area is acceptable, as is the case for the Proposed Project.

Direct impacts to biological resources within the CNF-managed lands may be caused by vegetation removal, installation of permanent pole structures, and excavation and grading, which would result in both temporary and permanent impacts during construction. Temporary and permanent impacts within CNF-managed lands are summarized in Table 3.5-15: Impacts to Vegetation Communities and Land Covers within the Cleveland National Forest. The three vegetation communities—chaparral, coastal sage scrub, and coastal sage/chaparral mix—that

would be impacted within CNF-managed lands provide suitable habitat for special-status species, including the USFSS species. The Proposed Project has been sited and designed to avoid temporary and permanent impacts from Proposed Project components within RCAs[23] by locating most of the Proposed Project components outside of the RCAs. Some Proposed Project components (i.e., Pole 53, the associated temporary work area, and helicopter landing zone) would occur within the boundaries identified for RCAs occurring on CNF-managed lands (USFS 2016). The Proposed Project would result in approximately 0.26 acre and 0.18 acre of temporary and permanent impacts, respectively, to the RCAs identified within CNF-managed lands. The Proposed Project components have been sited to minimize impacts to RCAs by locating the Proposed Project components in areas that are upslope and outside of the aquatic features and associated riparian habitat included in RCAs within CNF-managed lands. Attachment 3.5-B: Aquatic Resources within the Survey Area depicts aquatic features in proximity to the Proposed Project components, which have been sited to be outside of the aquatic features and associated riparian habitat within the RCAs. No impacts to riparian-dependent species within RCAs would be anticipated on CNF-managed lands.

Table 3.5-15: Impacts to Vegetation Communities and Land Covers within the Cleveland National Forest

Vegetation Community or Land Cover	Approximate Temporary Impacts (acres)	Approximate Permanent Impacts (acres)	Approximate Temporary Impacts within RCAs (acres)	Approximate Permanent Impacts within RCAs (acres)
Bare Ground	0.07	0.01	0.00	0.00
Chaparral	1.47	1.72	0.25	0.18
Coastal Sage Scrub	0.06	<0.01	0.00	0.00
Coastal Sage/ Chaparral Mix	0.24	0.20	0.01	0.00
Disturbed	0.01	0.00	0.00	0.00
Total	**1.85**	**1.94**	**0.26**	**0.18**

Indirect impacts to biological resources within CNF-managed lands may be caused by noise created from construction equipment and workers located on site, which could impact sensitive species within the CNF-managed lands, dust created from construction activities that may reduce plant and forest productivity, and the introduction and spread of invasive plant species. As described previously, O&M activities for the Proposed Project would be similar to those currently performed by SDG&E for existing facilities in the area. Therefore, the Proposed Project would result in a nominal increase in O&M activities, such as increased maintenance and inspection trips. However, O&M activities would occur in existing or new ROWs and would be

[23] RCAs include "aquatic and terrestrial ecosystems and lands adjacent to perennial, intermittent, and ephemeral streams, as well as around meadows, lakes, reservoirs, ponds, wetlands, vernal pools, seeps, springs and other water bodies. Riparian dependent resources are those natural resources that owe their existence to the area, such as fish, amphibians, reptiles, fairy shrimp, aquatic invertebrates, plants, birds, mammals, soil and water quality." (USFS 2005)

short duration and infrequent. Given the limited nature of these continuing operations and that O&M would occur within previously disturbed areas of the ROW, potential impacts to wildlife movement or established corridors would be less than significant.

Dust would be minimized in accordance with applicable water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality, and in compliance with applicable air district rules and regulations as described in Section 3.4 Air Quality, which would minimize dust from settling onto vegetation. In addition, the Proposed Project would be sited such that the proposed 230 kV OH segment on CNF-managed lands would occur in close proximity to existing transmission lines to minimize new potential impacts within CNF-managed lands. SDG&E would implement APM BIO-01 to identify special-status species with potential to occur in areas not yet surveyed. Additionally, SDG&E would implement APMs BIO-01, BIO-04, and BIO-05 to verify ESAs are avoided, Proposed Project activities are limited to delineated construction work areas, and that all construction personnel and employees attend a WEAP training on the identification of sensitive resources and receive contact information for key Proposed Project personnel. APMs BIO-03 and BIO-06 through BIO-18 would verify that construction activities are conducted in a manner that would minimize potential impacts to species and their habitat. To minimize impacts to species and habitat within CNF-managed lands, SDG&E would implement APM BIO-02 to restore areas that are temporarily impacted and MMs BIO-02, BIO-07, BIO-09, BIO-11, and BIO-13 to mitigate for permanent impacts that would not be restored. Further, construction activities occurring on CNF-managed lands would require a Special Use Permit from the USFS. All work proposed within CNF-managed lands would be authorized under this permit and the Proposed Project would be required to comply with the CNF LMP, including Part 2 Strategy goals and objectives. Additionally, any work that may result in potential take of federally listed species or their habitat (e.g., Hermes copper butterfly or its critical habitat) within CNF-managed lands would comply with the FESA Section 7 consultation requirements. SDG&E would implement the terms and conditions of the Section 7 consultation, which may require mitigation for permanent impacts. Therefore, the potential impacts from construction and O&M activities for the Proposed Project would be less than significant with mitigation and would not conflict with the provisions and implementation of the CNF LMP.

Sweetwater Authority Natural Community Conservation Plan/Habitat Conservation Plan

No Impact. The Sweetwater Authority NCCP/HCP is currently under development and has not been approved by the USFWS or CDFW. The list of covered activities and covered species is still being developed, as well as any potential Preserve areas. Therefore, the Proposed Project would not conflict with this NCCP/HCP as the Proposed Project would be considered part of the existing conditions evaluated as the plan is being developed, and no impact would occur.

3.5.4.5.7 Impact BIO-07: Create a Substantial Collision or Electrocution Risk for Birds or Bats

Construction, Operations and Maintenance

Less-than-Significant Impact. Direct risks to avian and bat species may include collision and electrocution associated with the overhead transmission structures and poles and could result in potentially significant impacts to individuals leading to injury or mortality. Similar transmission structures are already present and maintained adjacent to the Proposed Project. SDG&E's

Sunrise Powerlink, TL 625, and the existing Suncrest Substation already present a risk for collision, but resident birds and bats have likely grown accustomed to these obstructions. Further, the potential for new collision and electrocution risk would be limited to the proposed 230 kV OH segment. However, the risk for collision is low for bats due to bats' use of echolocation to navigate around power lines and other aboveground components, and because the size of their wingspan is less than the Proposed Project's conductor spacing. Modifications to the existing Suncrest Substation would not pose additional collision or electrocution risk to avian or bat species. Proposed Project facilities would be further designed to minimize the potential for collision and electrocution risk by constructing the Proposed Project in accordance with APLIC guidelines, in accordance with APM BIO-17. With the implementation of this APM, potential collision or electrocution risks to avian species and bats would be less than significant.

3.5.5 References

APLIC. 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC and Sacramento, CA. Online. https://www.nrc.gov/docs/ML1224/ML12243A391.pdf. Site visited May 2025.

APLIC. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, DC. Online. https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Site visited May 2025.

Audubon. 2025. Important Bird Areas. Online. https://www.audubon.org/important-bird-areas. Site visited June 2025.

California Herps. 2025a. Ensatina eschscholtzii klauberi - Large-blotched Ensatina. Online. https://californiaherps.com/salamanders/pages/e.e.klauberi.html. Site visited April 2025.

California Herps. 2025b. Rosy Boa - Lichanura orcutti. Online. https://www.californiaherps.com/snakes/pages/l.orcutti.html. Site visited April 2025.

California Herps. 2025c. San Diegan Legless Lizard - Anniella stebbinsi. Online. https://californiaherps.com/lizards/pages/a.stebbinsi.html. Site visited April 2025.

Cal-IPC. 2012. Preventing the Spread of Invasive Plants: Best Management Practices For Transportation and Utility Corridors. Online. https://www.calipc.org/resources/library/publications/tuc/. Site visited November 2025.

Cal. Code Regs. 2025. Title 14 Natural Resources. Online. https://govt.westlaw.com/calregs/Index?transitionType=Default&contextData=%28sc.Default%29. Site visited June 2025.

CDFW. 2022. Amendment to San Diego Gas & Electric Company Subregional Natural Community Conservation Plan and California Endangered Species Act and Natural Communities Conservation Planning Act Management Authorization Regarding Wildfire Safety Activities. Online.

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=195778&inline. Site visited October 2025.

CDFW. 2023. Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species. Online. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline. Site visited October 2025.

CDFW. 2025a. California Sensitive Natural Communities - Thursday, February 27, 2025. Online. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline. Site visited February 2026.

CDFW. 2025b. Fish and Game Code. Online. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code+-+FGC. Site visited June 2025.

CDFW. 2025c. NCCP Plan Summary – San Diego Multiple Species Conservation Program (MSCP). Online. https://wildlife.ca.gov/Conservation/Planning/NCCP/Plans/San-Diego-MSCP. Site visited July 2025.

CDFW. 2025d. CNDDB. Online. https://www.wildlife.ca.gov/Data/CNDDB/Data-Updates. Site visited May 2025.

CDFW. 2025e. California Wildlife: Life History and Range Maps. California Wildlife Habitat Relationships. Online. https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range. Site visited April 2025.

Code of Fed. Regs. 2025. Title 50 Wildlife and Fisheries. Online. https://www.ecfr.gov/. Site visited April 2025.

City of El Cajon. 2000. City of El Cajon General Plan 2000. Online. https://www.elcajon.gov/home/showpublisheddocument/140/635497086233100000. Site visited February 2026.

City of La Mesa. 1998. City of La Mesa Subarea Habitat Conservation Plan/Natural Community Conservation Plan. Online. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=35090&inline. Site visited October 2025.

City of San Diego. 1998. Final Multiple Species Conservation Program Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/docs/SCMSCP/FinalMSCPProgramPlan.pdf. Site visited October 2025.

City of Santee. 2025. Santee MSCP Subarea Plan – Public Review Draft. Online. https://www.cityofsanteeca.gov/departments/city-clerk/document-central/planning-building/active-projects/mscp-subarea-plan/santee-subarea-plan-prd.pdf. Site visited October 2025.

CNPS. 2025a. A Manual of California Vegetation Online. Online. http://vegetation.cnps.org/. Site visited May 2025.

CNPS. 2025b. Inventory of Rare and Endangered Plants of California. Online. http://www.rareplants.cnps.org/. Site visited May 2025.

County of San Diego. 1997. Multiple Species Conservation Program County of San Diego Subarea Plan.

County of San Diego. 2010. Biological Mitigation Ordinance. Online. https://www.sandiegocounty.gov/pds/mscp/docs/SCMSCP/BMO_Update_2010.pdf. Site visited October 2025.

County of San Diego. 2011a. San Diego County General Plan Update. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/docs/GP/ConservationandOpenSpace.pdf. Site visited July 2025.

County of San Diego. 2011b. Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/CREST-CP-11-18-15.pdf. Site visited November 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 2025.

County of San Diego. 2021. North and East County Multiple Species Conservation Program Plans NCCP Planning Agreement No. 2810-2007-002-05. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/2021-PlanningAgreement-RestatedandAmended.pdf. Site visited July 2025.

CPUC. 2025. General Order No.165. Online. https://docs.cpuc.ca.gov/PUBLISHED/GENERAL_ORDER/159182.htm. Site visited October 2025.

EirGrid. 2015. Evidence Based Environmental Studies – Study 3 Bats. Online. https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/part2/DWR-1108%20EirGrid%202015.pdf. Site visited October 2025.

Faber-Langendoen, D.; Keeler, T.; Meidinger, D.; Josse, C.; Weakley, A.; Tart, D.; Navarro, G.; Hoagland, B.; Ponomarenko, S.; Fults, G.; Helmer, E. 2016. Classification and description of world formation types. Gen. Tech. Rep. RMRS-GTR-346. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 222 p.

GreenInfo Network. 2025a. California Conservation Easement Database Layer – Version 2025a. Online. https://www.calands.org/. Site visited September 2025.

GreenInfo Network. 2025b. California Protected Areas Database Layer – Version 2025a. Online. https://www.calands.org/. Site visited September 2025.

Insignia. 2026a. Sycamore Canyon 230 Kilovolt Loop-In to Suncrest Project Biological Resources Technical Report.

Insignia. 2026b. Sycamore Canyon 230 Kilovolt Loop-In to Suncrest Project Aquatic Resources Delineation Report.

Insignia. 2026c. Sycamore Canyon 230 Kilovolt Loop-In to Suncrest Project Botanical Resources Report.

Nature Serve. 2025. Choeronycteris mexicana. Mexican Long-tongued Bat. Online. https://explorer.natureserve.org/Taxon/ELEMENT_GLOBAL.2.101310/Choeronycteris_mexicana. Site visited May 2025.

NOAA Fisheries. 2025a. Essential Fish Habitat Mapper. Online. https://www.habitat.noaa.gov/apps/efhmapper/. Site visited May 2025.

NOAA Fisheries. 2025b. National ESA Critical Habitat Mapper. Online. https://www.fisheries.noaa.gov/resource/map/national-esa-critical-habitat-mapper. Site visited May 2025.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California", Robert F. Holland, Ph.D., October 1986.

O'Brien, J. W., and R. M. Barabe. 2022. Status and distribution of Arroyo Chub within its native range. California Fish and Wildlife Journal 108:e5.

SanGIS. 2025. SanBIOS. Online. https://www.sangis.org/. Site visited June 2025.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, CA. 1300 pp.

SDCWA. 2010. San Diego County Water Authority Subregional Natural Community Conservation Plan/Habitat Conservation Plan.

SDG&E. 1995. Subregional Natural Community Conservation Plan.

SDG&E. 2007. Quino Checkerspot Butterfly Low-Effect Habitat Conservation Plan.

SDG&E. 2020a. Operations and Maintenance Wildland Fire Prevention Plan. Effective May 22, 2020

SDG&E. 2020b. Standards Regarding SDG&E Transmission Corridors. Revised September 2020.

SDG&E. 2023. Final San Diego Gas & Electric Company Habitat Conservation Plan Amendment.

SDG&E. 2024a. Preserves and Proposed Preserves Data Layer.

SDG&E. 2024b. Best Management Practices Manual for Water Quality Construction.

Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Online. https://databasin.org/datasets/4f6cd2c4e5b4461e9de63e7f7eb2a67a/. Site visited June 2025.

Sweetwater Authority. 2022. SWA Received Grant from U.S. Fish and Wildlife Service. Online. https://www.sweetwater.org/CivicAlerts.aspx?AID=174&ARC=364. Site visited November 2025.

Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. Sacramento: California Department of Fish and Wildlife.

U.S.C. 2025. U.S. Code. Online. https://www.govinfo.gov/app/collection/uscode. Site visited June 2025.

USACE. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual. Online. http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Ordinary_High_Watermark_Manual_Aug_2008.pdf. Site visited May 2025.

USFS. 2005. Land Management Plan, Part 2 Cleveland National Forest Strategy. Online. https://www.fs.usda.gov/r05/cleveland/planning. Site visited October 2025.

USFS. 2016. S_R05_CNF_Riparian Conservation Area Data Layer. Provided to SDG&E by the USFS on January 29, 2016.

USFWS. 1998. Endangered Species Consultation Handbook – Procedures for Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act. Online. https://media.fisheries.noaa.gov/dam-migration/esa_section7_handbook_1998_opr5.pdf. Site visited October 2025.

USFWS. 2002. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for *Ambrosia pumila* (San Diego Ambrosia) from Southern California – Federal Register Vol. 67 No. 127 pg 44372. Online. https://www.govinfo.gov/content/pkg/FR-2002-07-02/pdf/02-16370.pdf. Site visited October 2025.

USFWS. 2011. *Baccharis vanessae* (Encinitas baccharis); 5-Year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office, Department of the Interior: Author. 47

pp.USFWS. 2022. Species Status Assessment Report for the California Spotted Owl (Strix occidentalis occidentalis), Version 2.0. November 2022. Sacramento, California.

USFWS. 2024a. Habitat Conservation Plan Updates Presentation. Online. https://www.fws.gov/sites/default/files/documents/2024-11/05-habitat-conservation-plan-updates_fall-2024.pdf. Site visited November 2025.

USFWS. 2024b. Monarch Butterfly (Danaus plexippus) Species Status Assessment Report. Version 2.3. Midwest Regional Office.

USFWS. 2025a. National Wetlands Inventory. Online. https://www.fws.gov/program/national-wetlands-inventory. Site visited May 2025.

USFWS. 2025b. Environmental Conservation Online System. Online. https://ecos.fws.gov/ecp/. Site visited May 2025.

USFWS. 2025c. IPaC Online System. Online. https://ecos.fws.gov/ipac/. Site visited May 2025.

Western Bat Working Group. 2015. Western Bat Working Group Species Accounts.

Williams, Paul H., Robbin W. Thorp, Leif L. Richardson, and Sheila R. Colla. 2014. Bumble Bees of North America: An Identification Guide. Princeton University Press, 2014.

XERCES Society. 2025a. Bumble Bee Watch Database. Online. https://www.bumblebeewatch.org/. Site visited April 2025.

XERCES Society. 2025b. Monarch Overwintering Site Viewer. Online. https://westernmonarchcount.org/map-of-overwintering-sites/. Site visited April 2025.

ATTACHMENT 3.5-A: VEGETATION COMMUNITIES AND LAND COVERS WITHIN THE SURVEY AREA

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ADMINISTRATIVE DRAFT

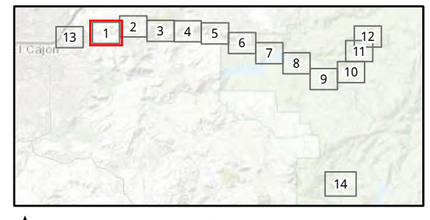
Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area Map 1 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV Western UG Segment

Vegetation Communities and Land Covers
- Agricultural
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental



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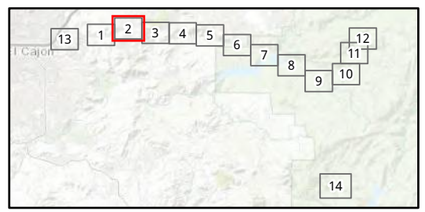
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 2 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Project Components
Proposed 230 kV Western UG Segment

Vegetation Communities and Land Covers
Bare Ground
Chaparral
Coast Live Oak Riparian Forest
Coastal Sage Scrub
Coastal Sage/Chaparral Mix
Developed
Disturbed
Landscaped/Ornamental
Open Oak Woodland



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Attachment 3.5-A: Vegetation Communities and Land Covers within the Survey Area Map 3 of 14

Suncrest 230 Kilovolt Loop-In Project

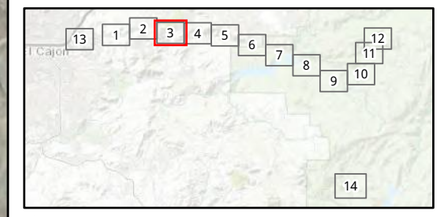
- Survey Area
- Area Not Accessed

Project Components

- Proposed Pole Location
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Concrete Lined Channel
- Developed
- Disturbed
- Landscaped/Ornamental



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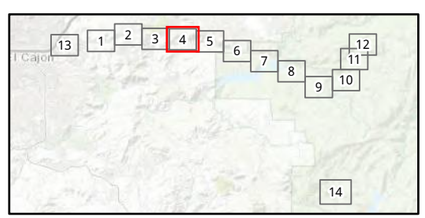
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 4 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Disturbed



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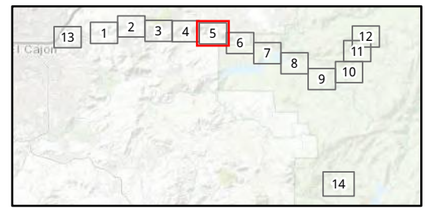
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 5 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Proposed Pole Location
Proposed 230 kV OH Segment
Vegetation Communities and Land Covers
Bare Ground
Coastal Sage Scrub
Coastal Sage/Chaparral Mix
Disturbed
Riparian Woodland



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Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 6 of 14

Suncrest 230 Kilovolt Loop-In Project

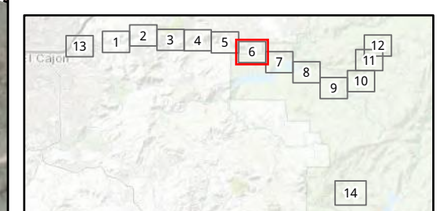
Survey Area

Project Components

- Proposed Pole Location
- Proposed 230 kV OH Segment

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Riparian Woodland



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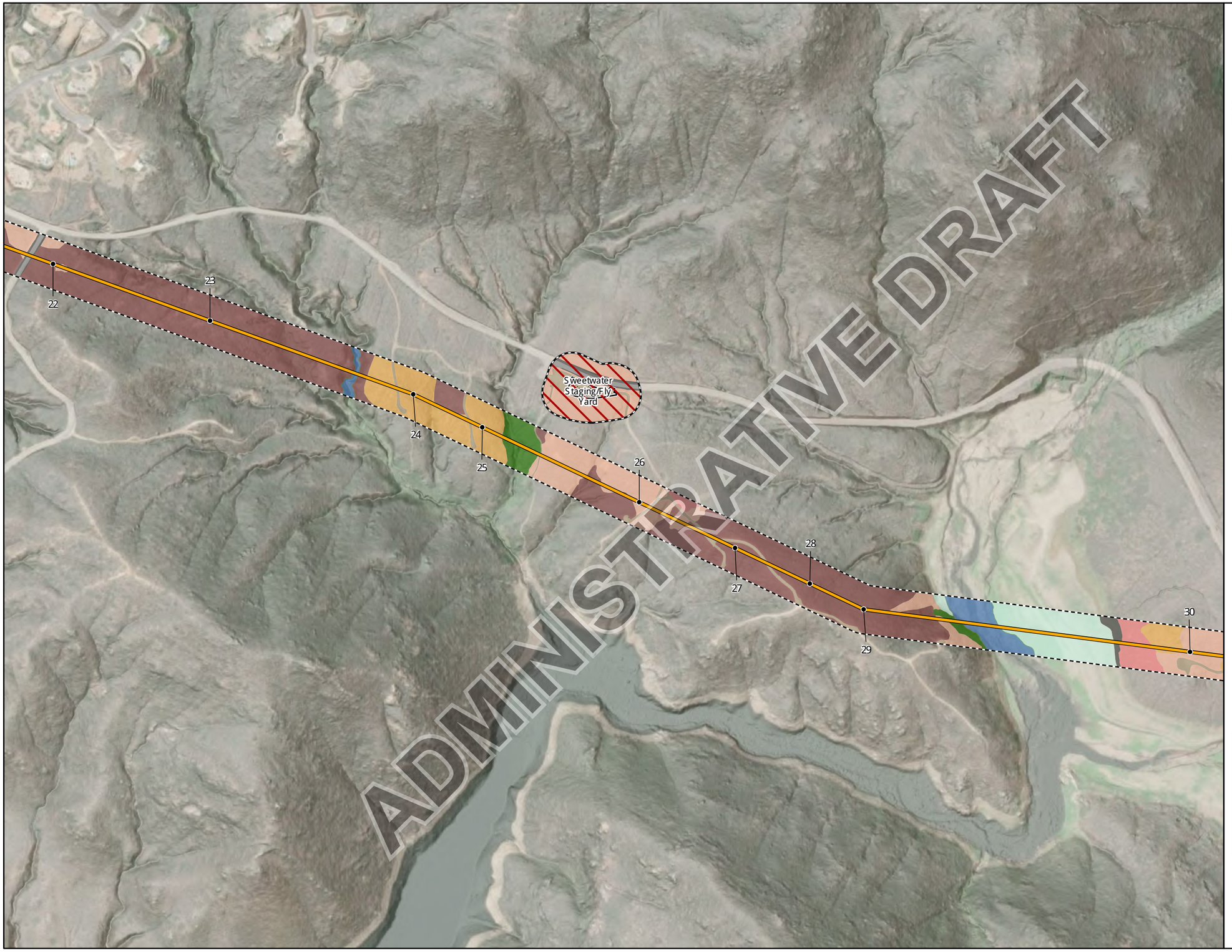


Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 7 of 14

Suncrest 230 Kilovolt Loop-In Project

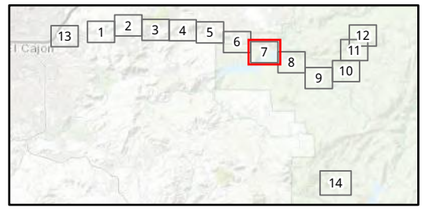
- Survey Area
- Area Not Accessed

Project Components

- Proposed Pole Location
- Proposed 230 kV OH Segment
- Staging Yard/Fly Yard

Vegetation Communities and Land Covers

- Bare Ground
- Buckwheat Scrub
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Non-Vegetated
- Riparian Woodland



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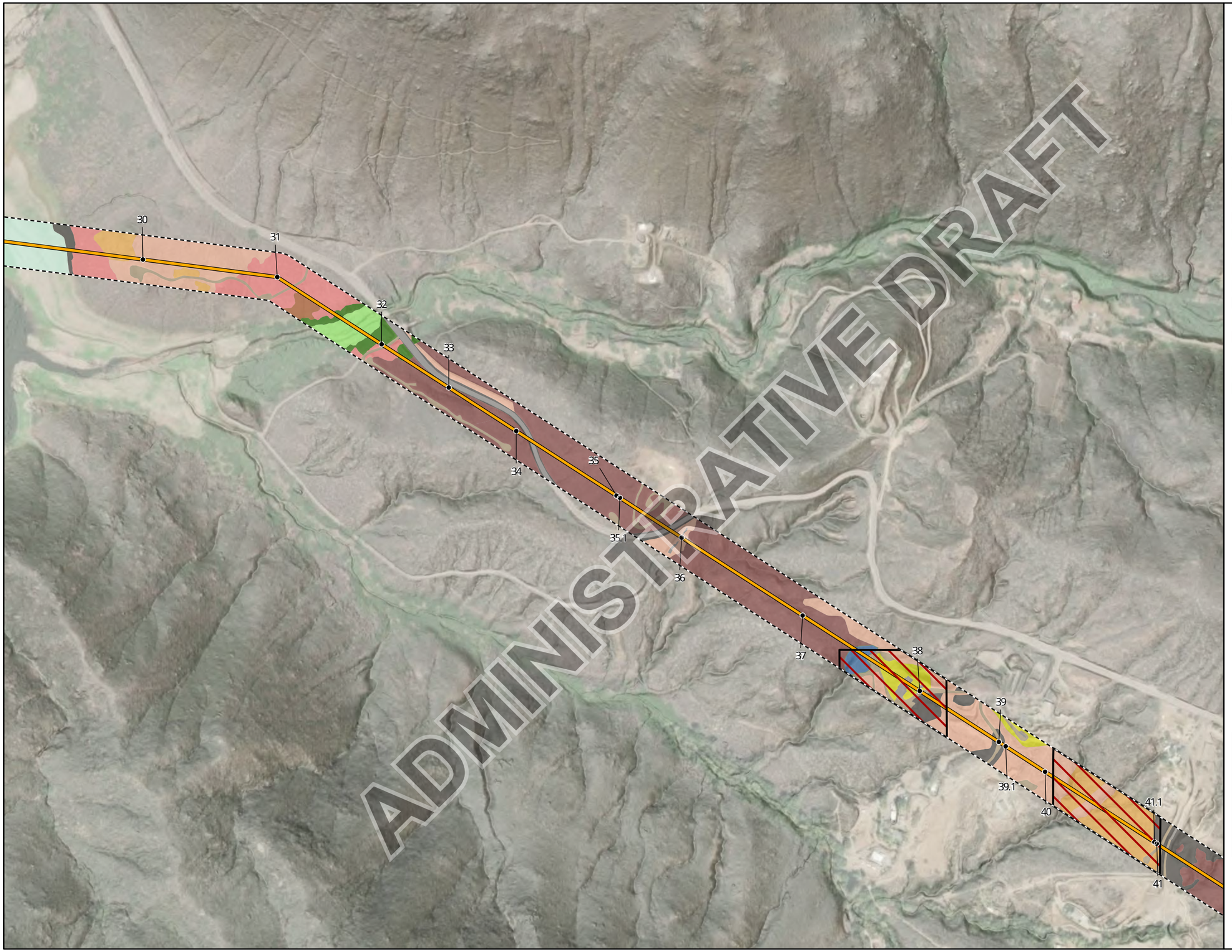


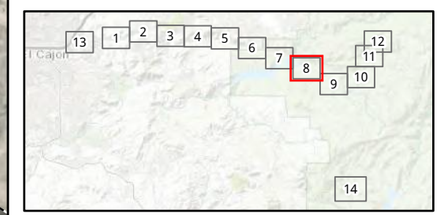
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 8 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Vegetation Communities and Land Covers
- Bare Ground
- Buckwheat Scrub
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental
- Non-Native Grassland
- Non-Vegetated
- Riparian Forest
- Riparian Woodland



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Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 9 of 14

Suncrest 230 Kilovolt Loop-In Project

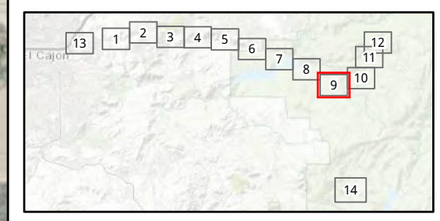
- Survey Area
- Area Not Accessed

Project Components

- Proposed Pole Location
- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental
- Riparian Forest



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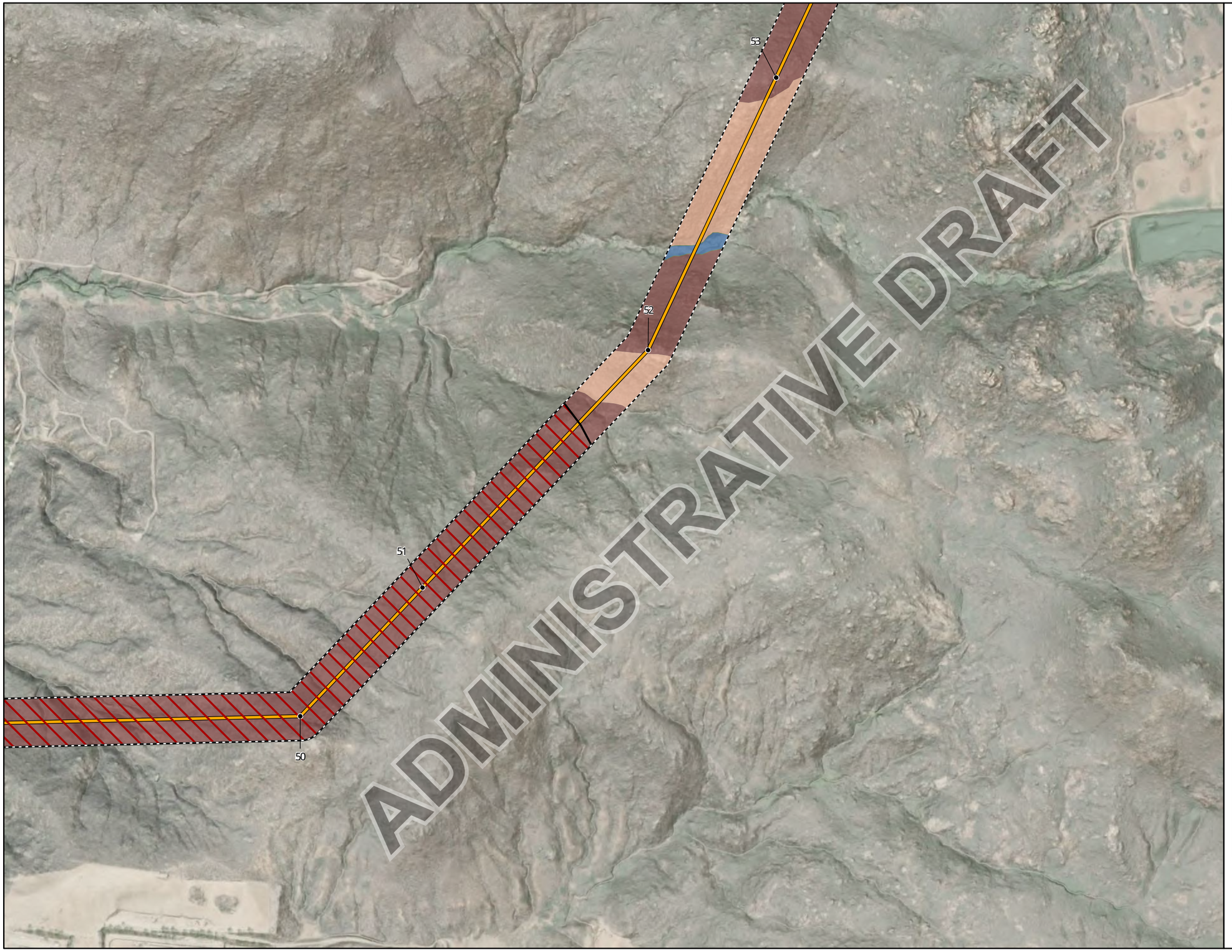
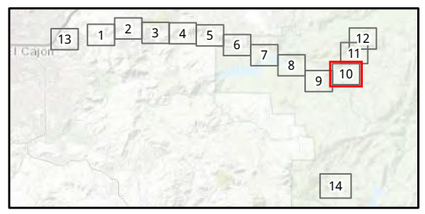


Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 10 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Proposed Pole Location
Proposed 230 kV OH Segment
Vegetation Communities and Land Covers
Chaparral
Coastal Sage Scrub
Riparian Woodland



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ADMINISTRATIVE DRAFT

Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 11 of 14

Suncrest 230 Kilovolt Loop-In Project

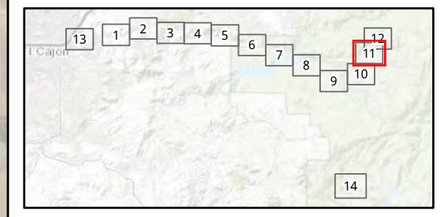
- Survey Area
- Existing Suncrest Substation

Project Components

- Proposed Pole Location
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV OH Segment

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Open Engelmann Oak Woodland
- Riparian Woodland



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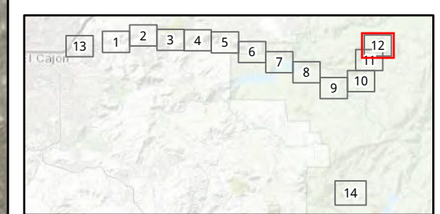
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 12 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Existing Suncrest Substation

Project Components
- Proposed Pole Location
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV OH Segment

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Open Engelmann Oak Woodland
- Open Oak Woodland



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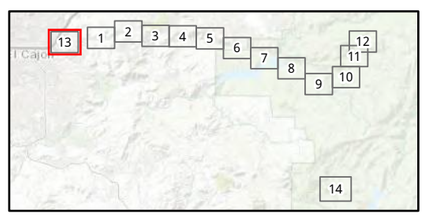
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 13 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Staging Yard
Vegetation Communities and Land Covers
Bare Ground
Developed
Disturbed
Landscaped/Ornamental



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ADMINISTRATIVE DRAFT

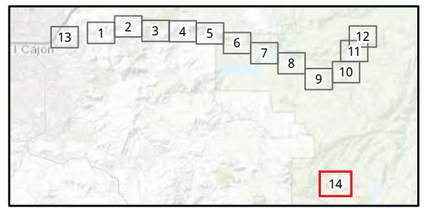
Attachment 3.5-A:
Vegetation Communities and Land Covers
within the Survey Area
Map 14 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Project Components
Staging Yard
Staging Yard/Fly Yard

Vegetation Communities and Land Covers
Bare Ground
Chaparral
Coastal Sage/Chaparral Mix
Disturbed
Non-Native Grassland



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ATTACHMENT 3.5-B: AQUATIC RESOURCES WITHIN THE SURVEY AREA

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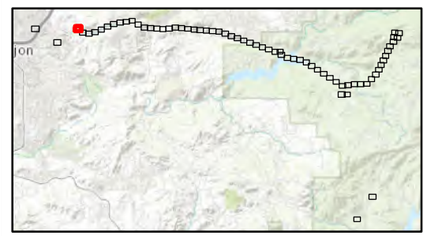
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 1 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Proposed Conventional Pole
- Proposed 230 kV Western UG Segment
- Vault



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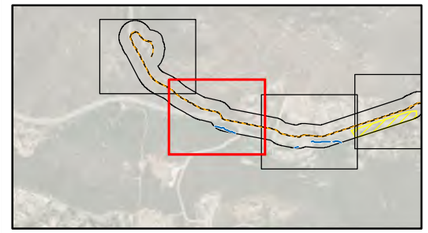
ADMINISTRATIVE DRAFT

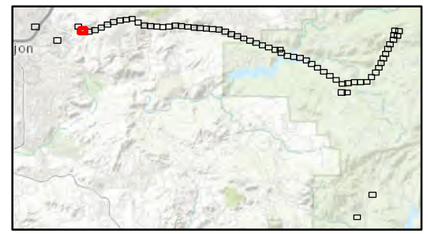
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 2 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment
- Vault





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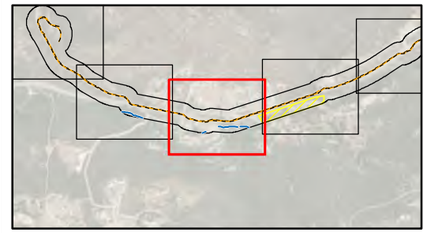
ADMINISTRATIVE DRAFT

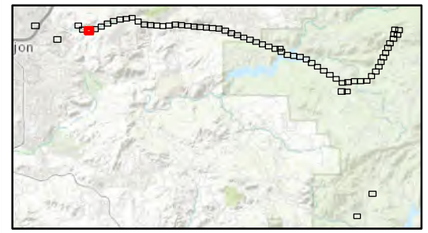
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 3 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment
- Vault





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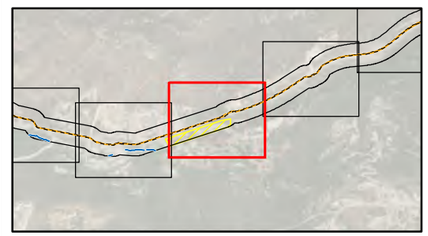
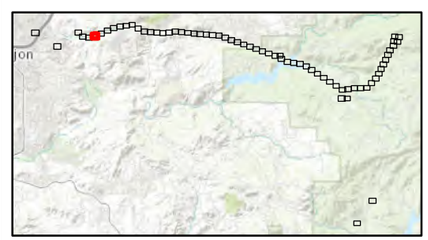
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 4 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Culvert
- NWI Feature (Freshwater Forested/Shrub Wetland)
- Proposed 230 kV Western UG Segment
- Vault





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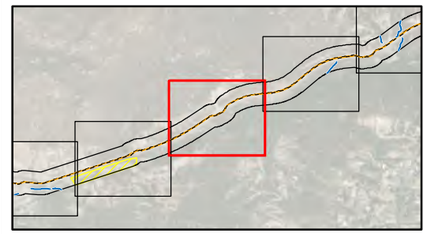
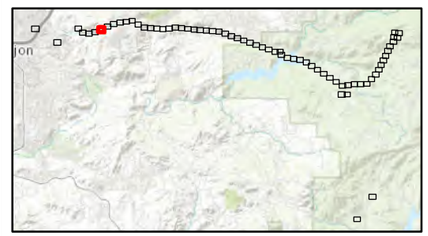
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 5 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Proposed 230 kV Western UG Segment
- Vault





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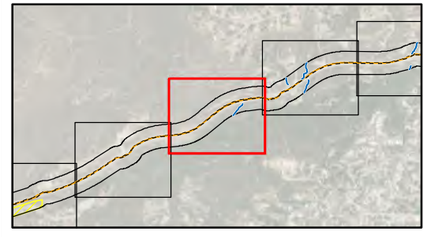
ADMINISTRATIVE DRAFT

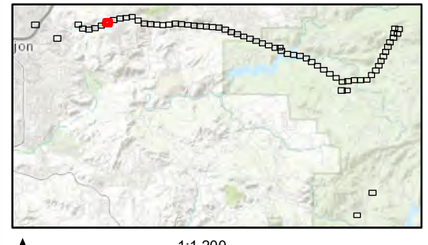
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 6 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment





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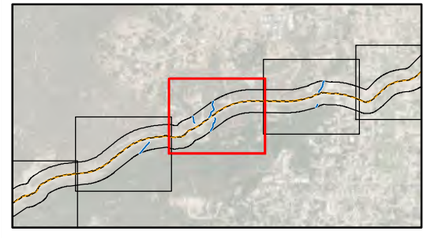
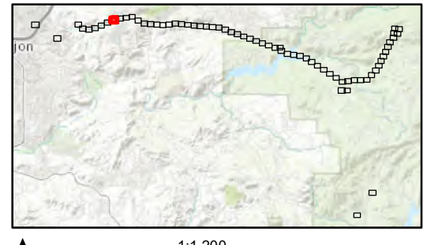
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 7 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment
- Vault





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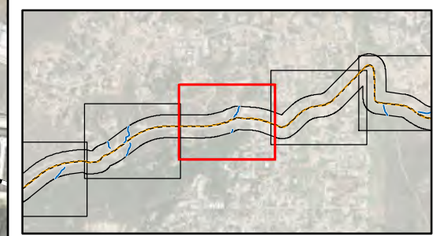
ADMINISTRATIVE DRAFT

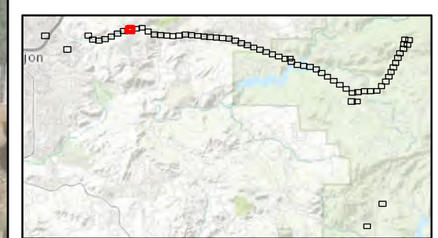
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 8 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment
- Vault





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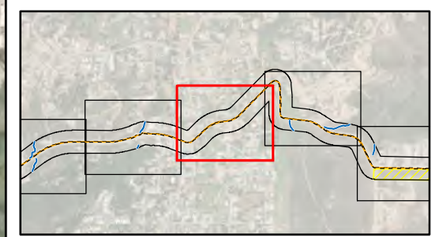
ADMINISTRATIVE DRAFT

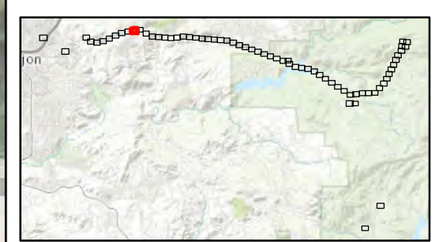
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 9 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Proposed 230 kV Western UG Segment





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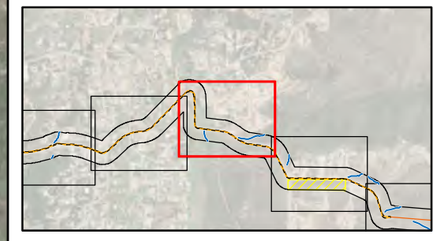
SDGE

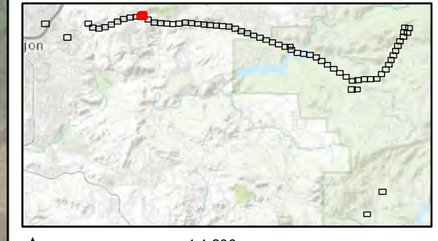
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 10 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment
- Vault





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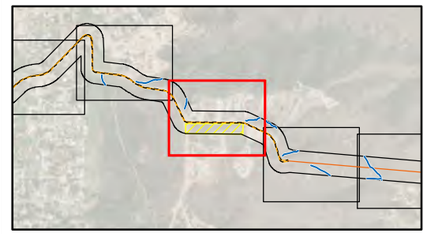
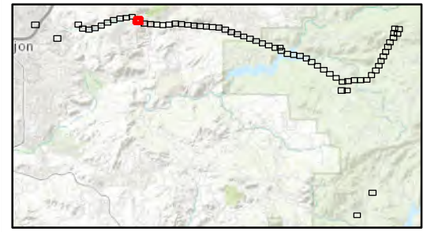
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 11 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment
- Vault





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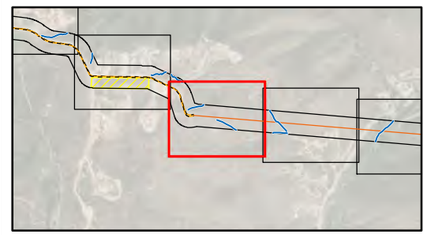
ADMINISTRATIVE DRAFT

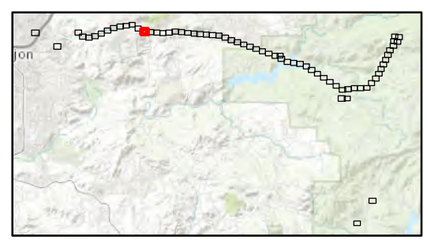
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 12 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment





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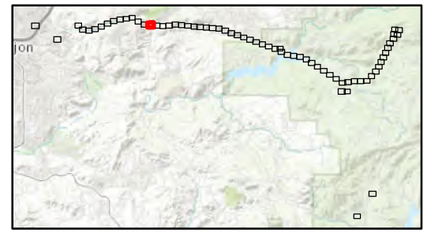
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 13 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment



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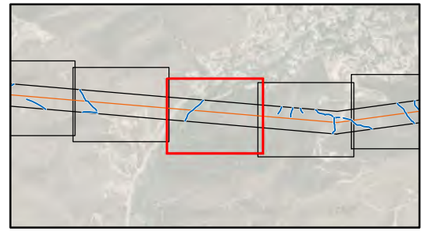
ADMINISTRATIVE DRAFT

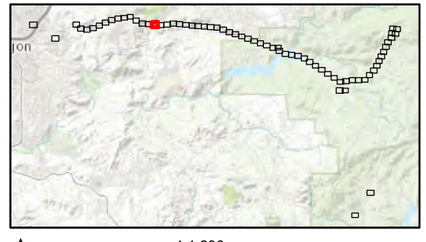
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 14 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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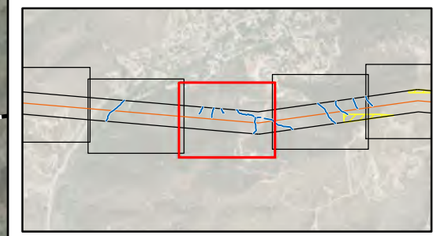
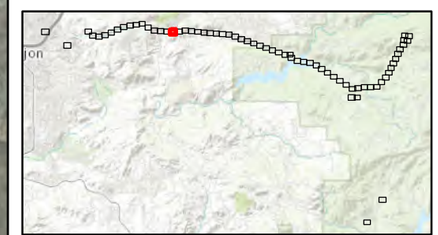
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 15 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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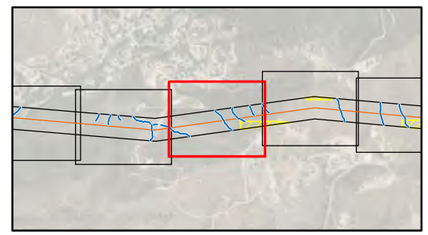
Attachment 3.5-B:
Aquatic Resources within the Survey Area

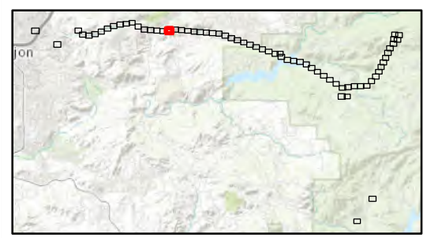
Map 16 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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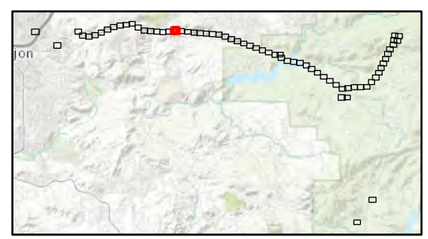
SDGE

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 17 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment



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0 100 200 Feet

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ADMINISTRATIVE DRAFT

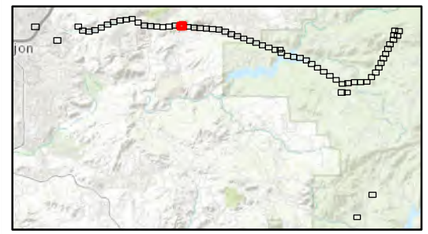
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 18 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.



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0 100 200 Feet

SDGE

ADMINISTRATIVE DRAFT

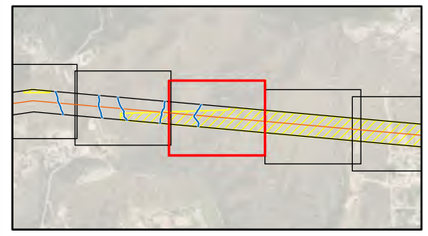
Attachment 3.5-B:
Aquatic Resources within the Survey Area

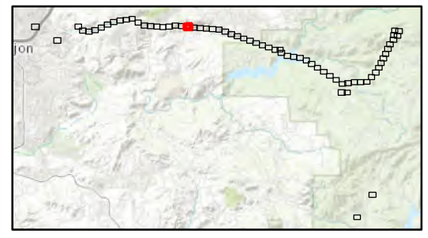
Map 19 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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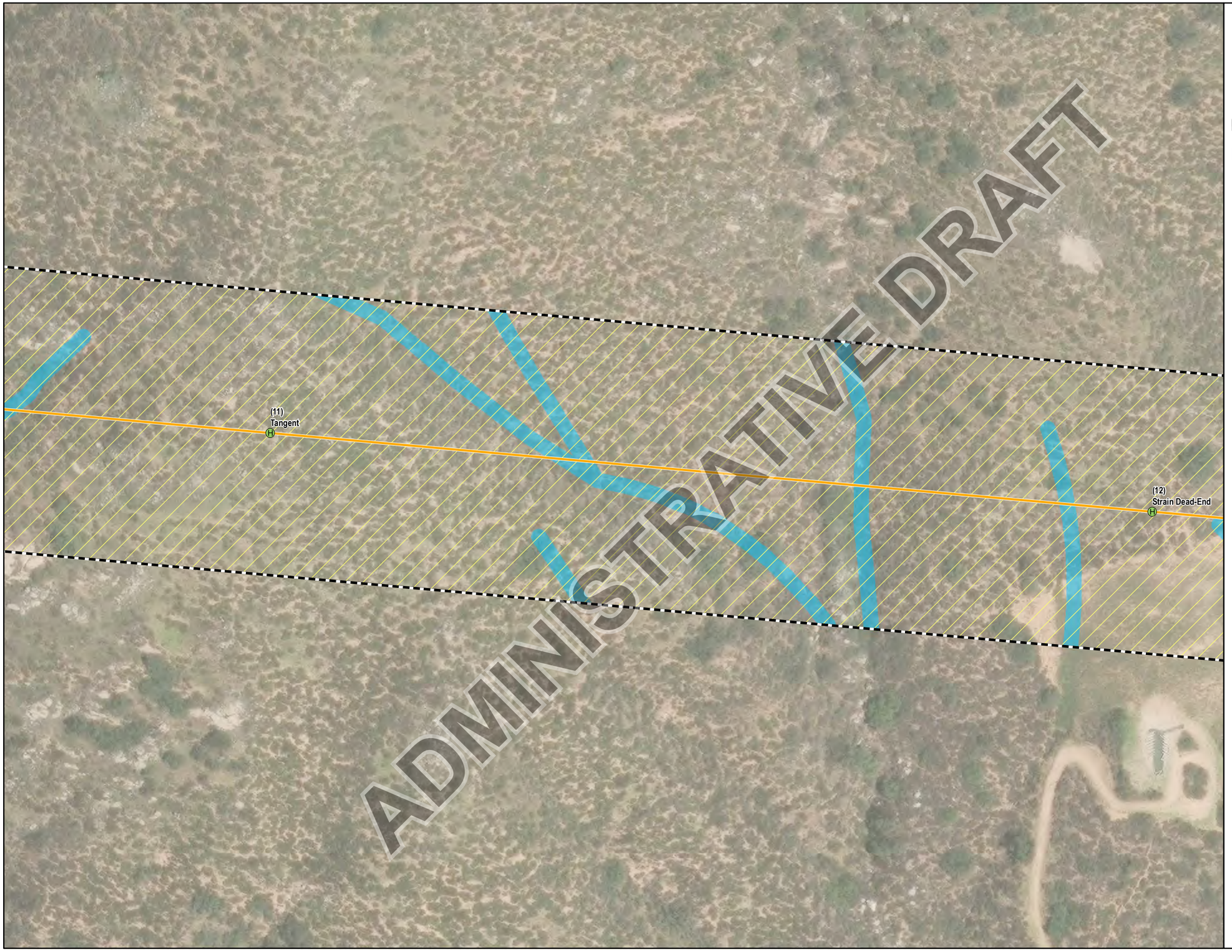
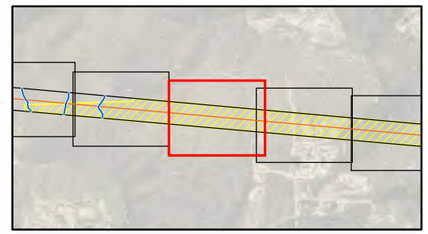


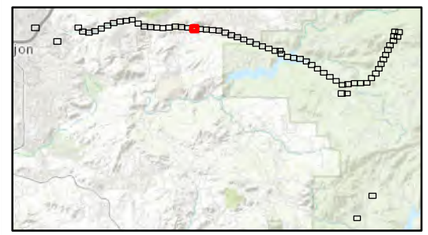
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 20 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

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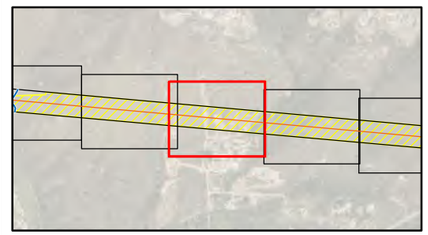
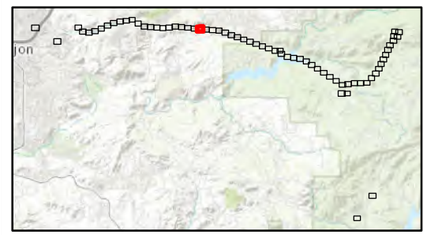
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 21 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

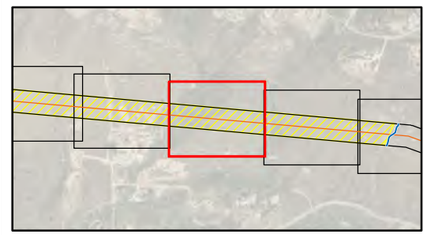
SDGE

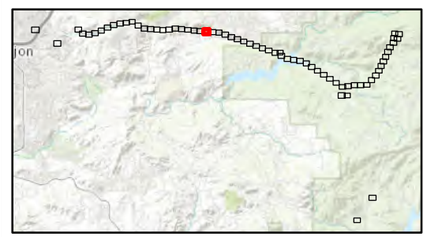
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 22 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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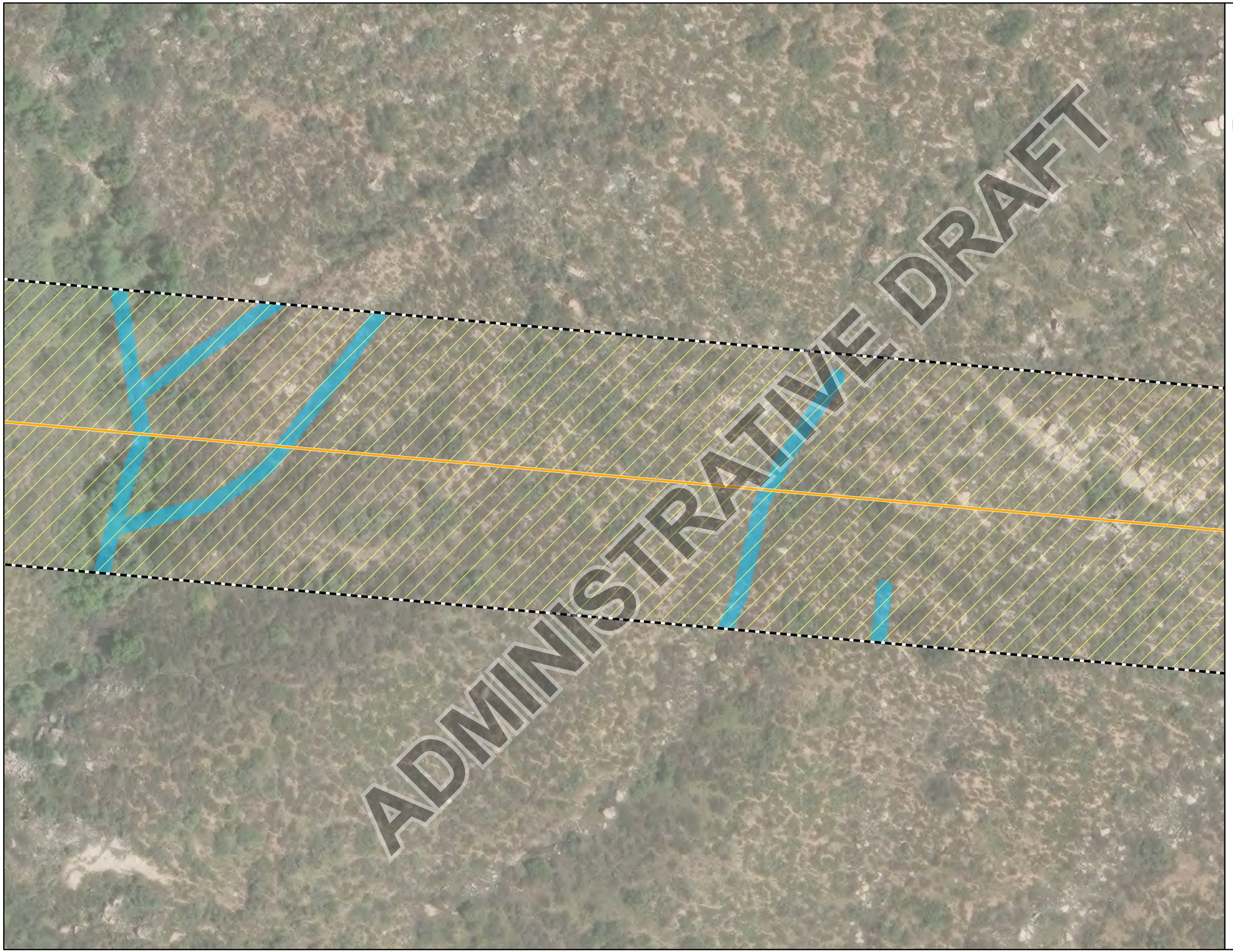
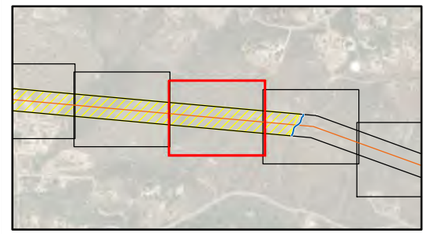


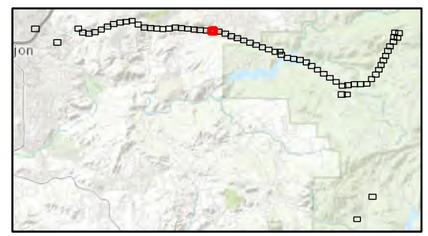
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 23 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed 230 kV OH Segment





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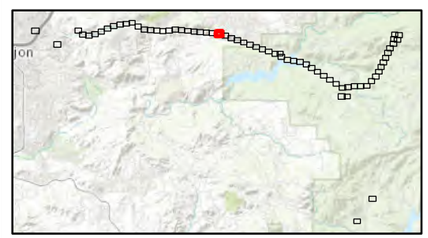
SDGE

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 24 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment



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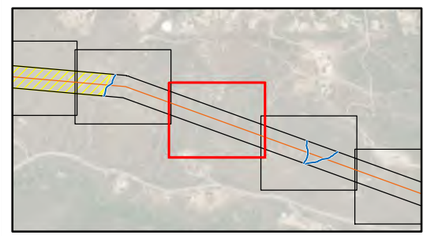
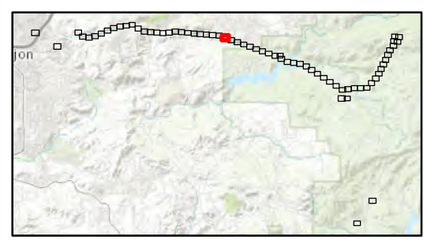
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 25 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Proposed 230 kV OH Segment





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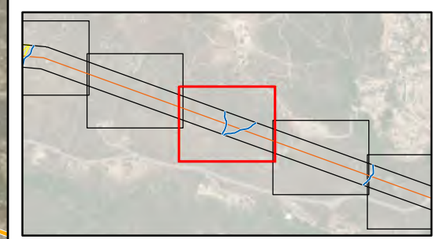
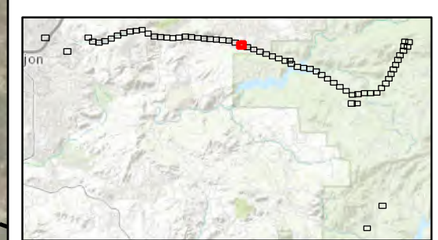
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 26 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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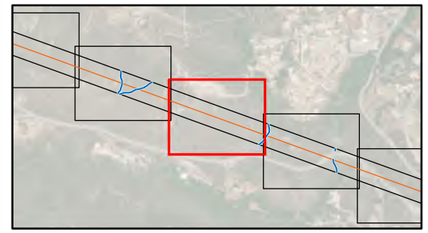
ADMINISTRATIVE DRAFT

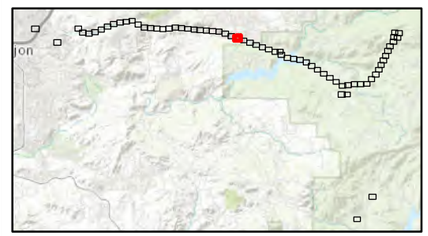
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 27 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





1:1,200

0 100 200 Feet

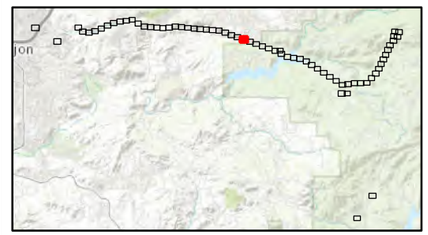
SDGE

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 28 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment



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0 100 200 Feet

SDGE

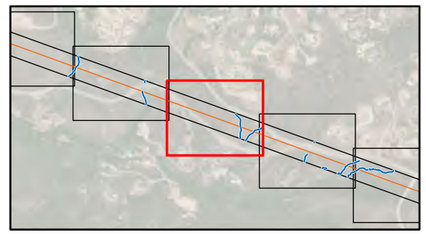
ADMINISTRATIVE DRAFT

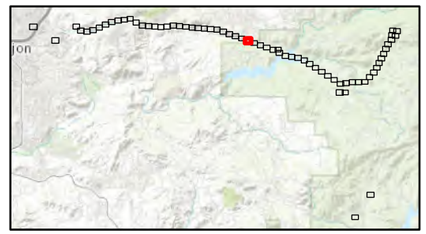
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 29 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

SDGE

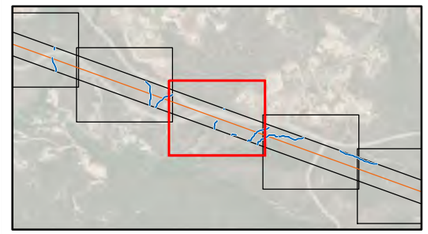
ADMINISTRATIVE DRAFT

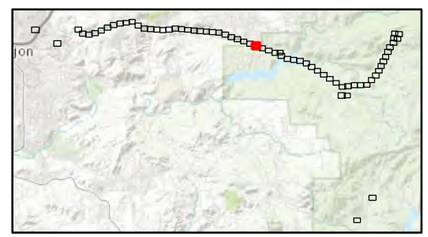
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 30 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

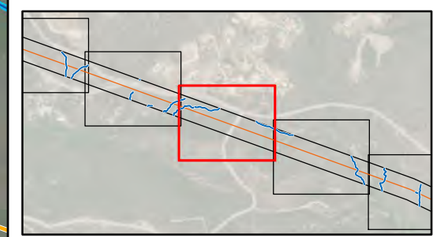
SDGE

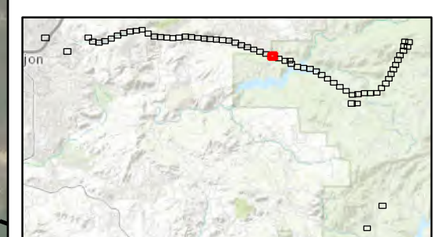
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 31 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

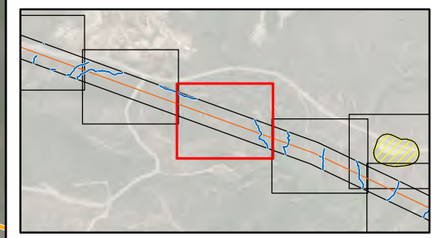
SDGE

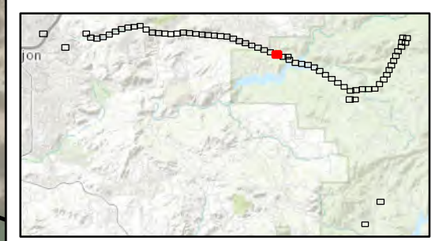
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 32 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

SDGE

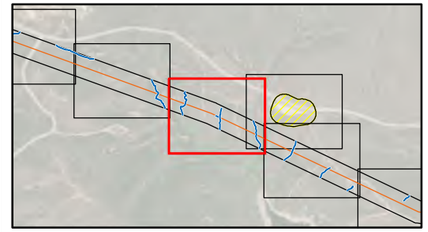
ADMINISTRATIVE DRAFT

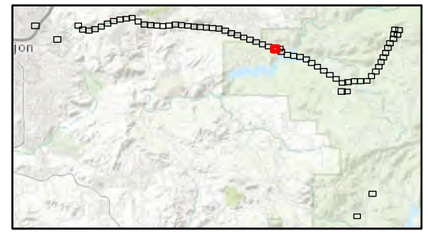
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 33 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

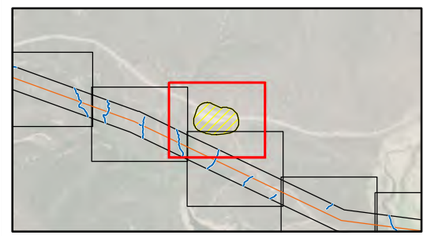
SDGE

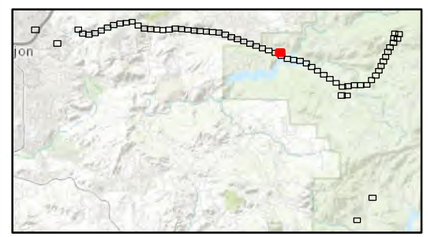
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 34 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment





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0 100 200 Feet

SDGE

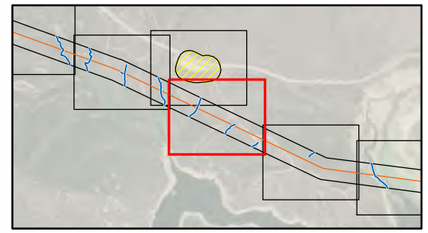
ADMINISTRATIVE DRAFT

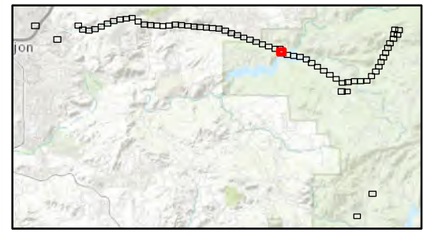
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 35 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





1:1,200

0 100 200 Feet

SDGE

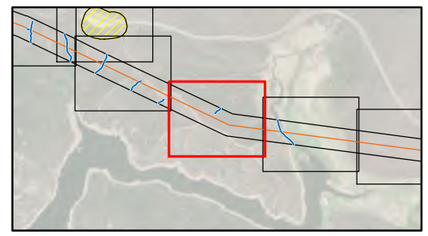
ADMINISTRATIVE DRAFT

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 36 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Potential Wetland
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment



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0 100 200 Feet

SDGE

ADMINISTRATIVE DRAFT

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 37 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Potential Wetland
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment

1:1,200

0 100 200 Feet

SDGE

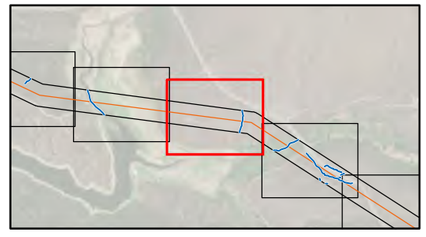
ADMINISTRATIVE DRAFT

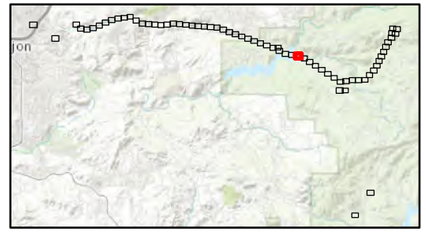
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 38 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





1:1,200

0 100 200 Feet

SDGE

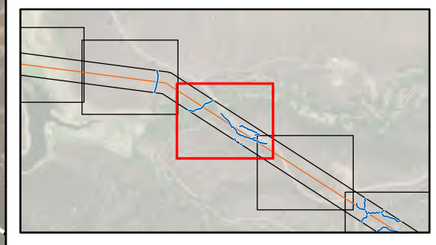
Attachment 3.5-B:
Aquatic Resources within the Survey Area

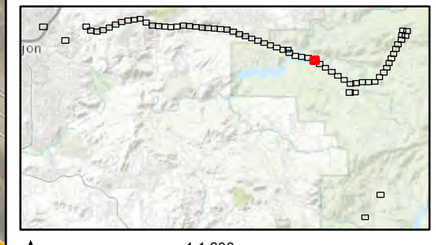
Map 39 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Potential Wetland
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

W-02
JD-064
(32)
Tangent
JD-066
(33)
Tangent
JD-068
JD-065
JD-069
JD-067
JD-067





1:1,200
0 100 200 Feet

SDGE

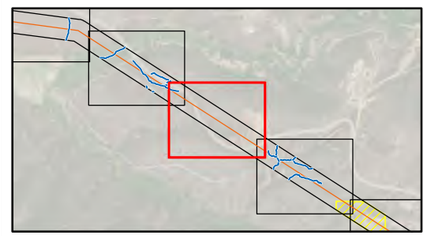
ADMINISTRATIVE DRAFT

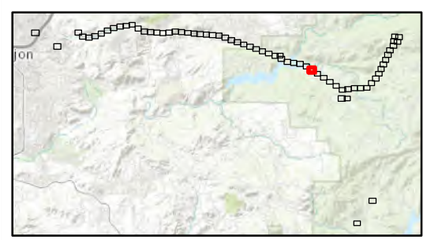
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 40 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





1:1,200

0 100 200 Feet

SDGE

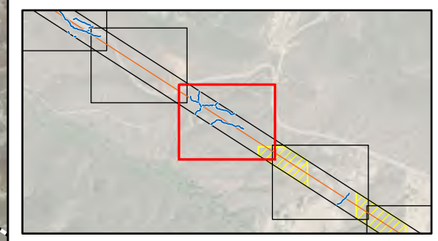
ADMINISTRATIVE DRAFT

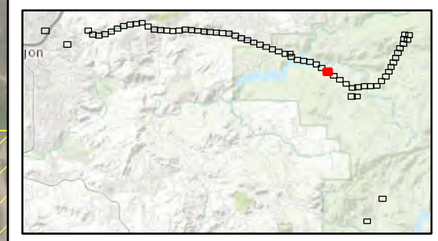
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 41 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

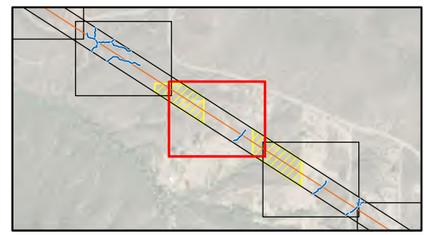
SDGE

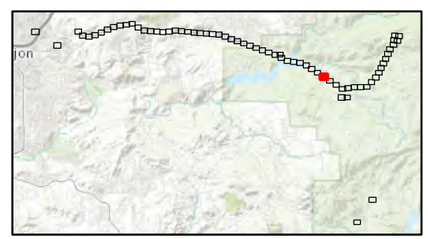
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 42 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

SDGE

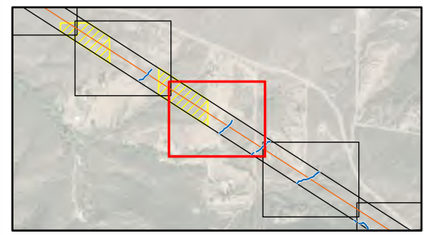
ADMINISTRATIVE DRAFT

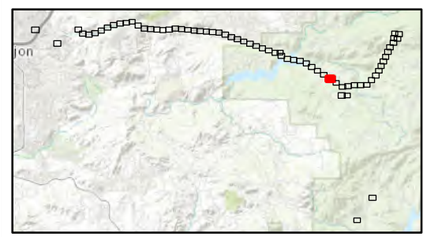
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 43 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

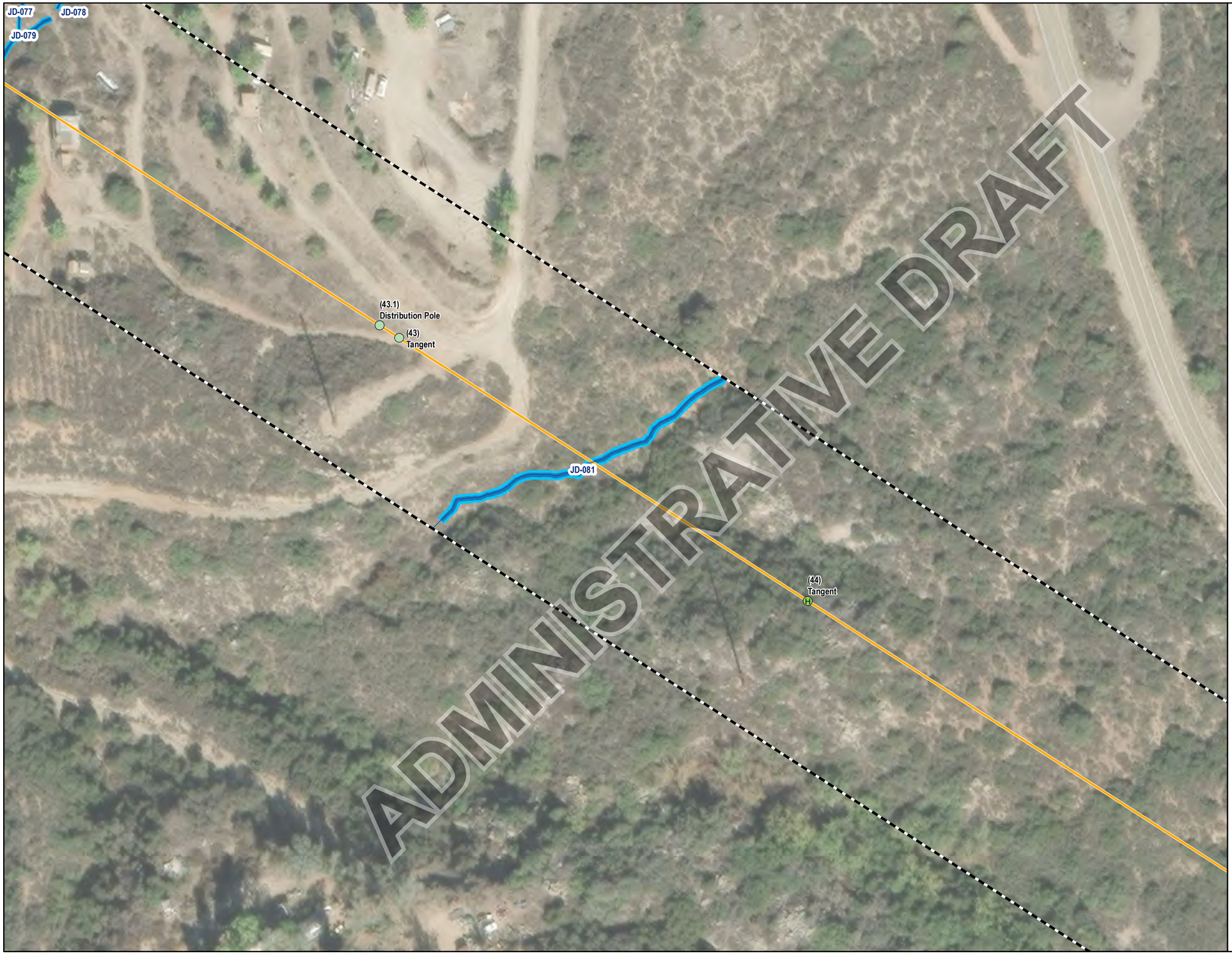




1:1,200

0 100 200 Feet

SDGE

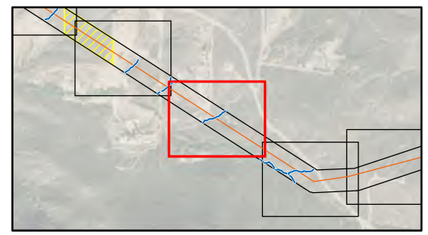


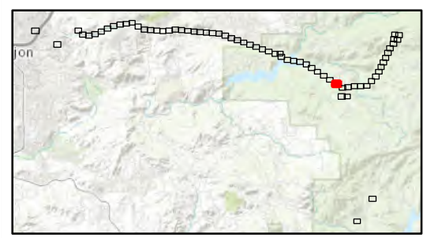
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 44 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

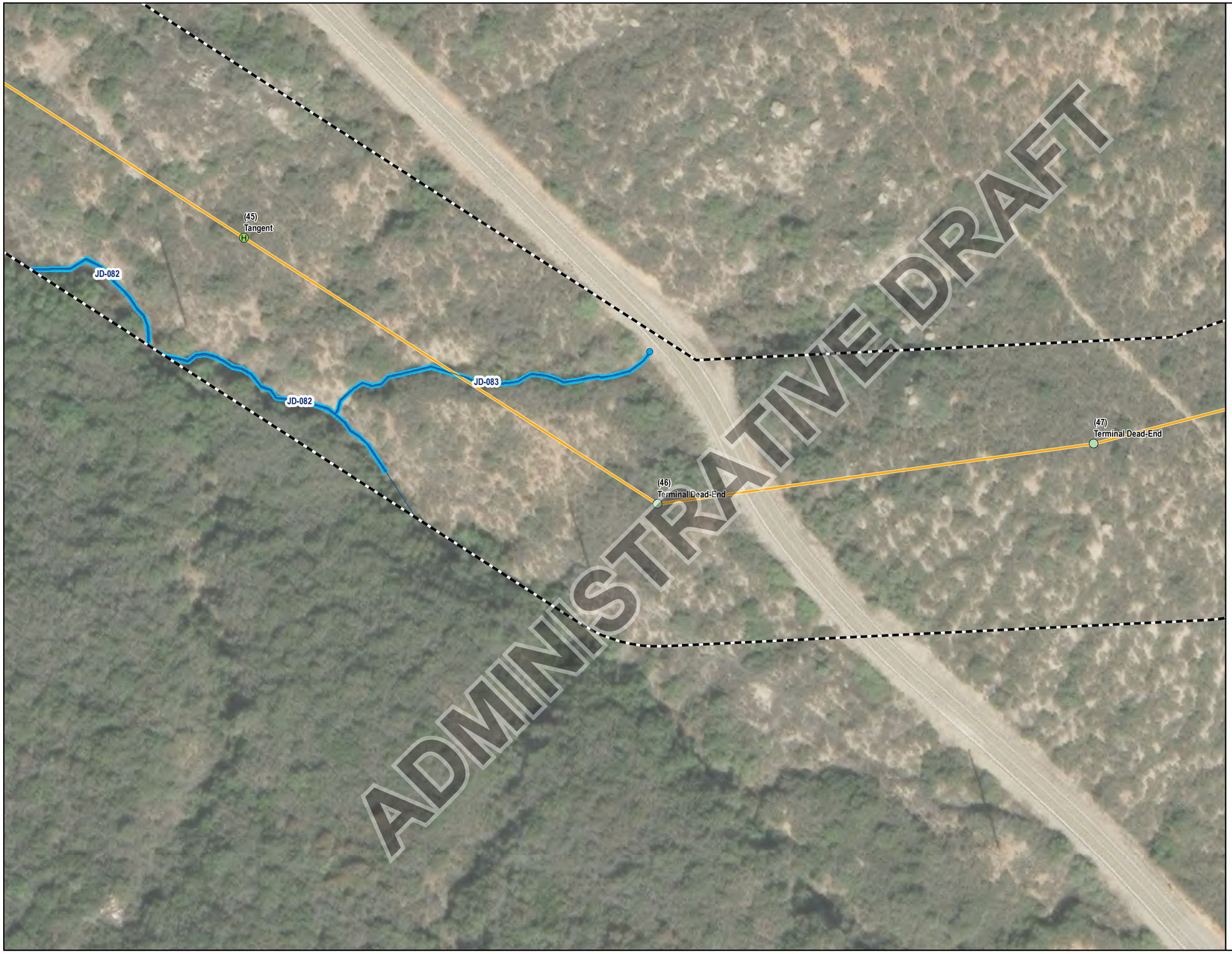




1:1,200

0 100 200 Feet

SDGE



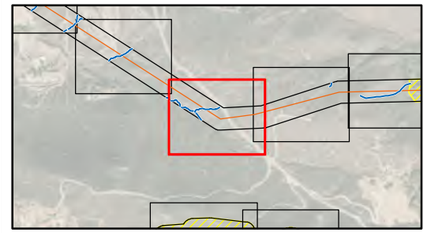
ADMINISTRATIVE DRAFT

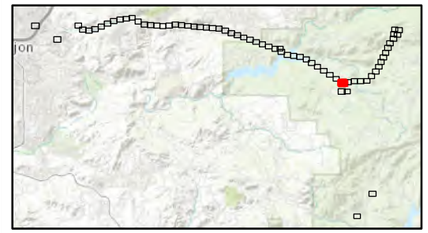
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 45 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment





1:1,200

0 100 200 Feet

SDGE

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 46 of 68

Suncrest 230 Kilovolt Loop-In Project

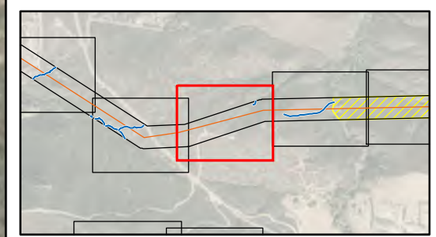
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

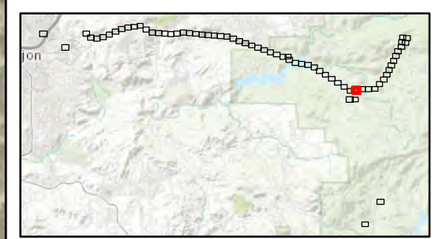
JD-084

(49)
Terminal Dead-End

(48)
Tangent

(47)
Terminal Dead-End





1:1,200
0 100 200 Feet

SDGE

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ADMINISTRATIVE DRAFT

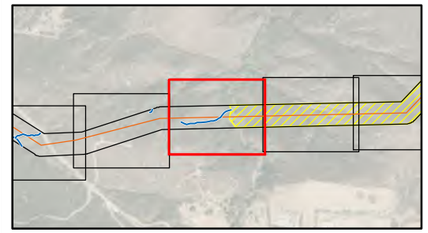
Attachment 3.5-B:
Aquatic Resources within the Survey Area

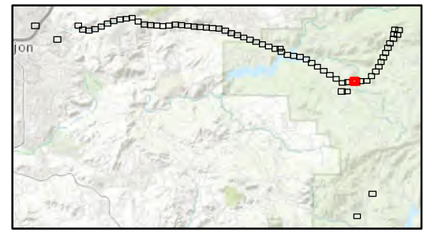
Map 47 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed 230 kV OH Segment

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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0 100 200 Feet

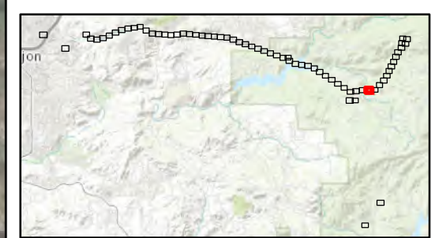
SDGE

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 48 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed 230 kV OH Segment



1:1,200

0 100 200 Feet

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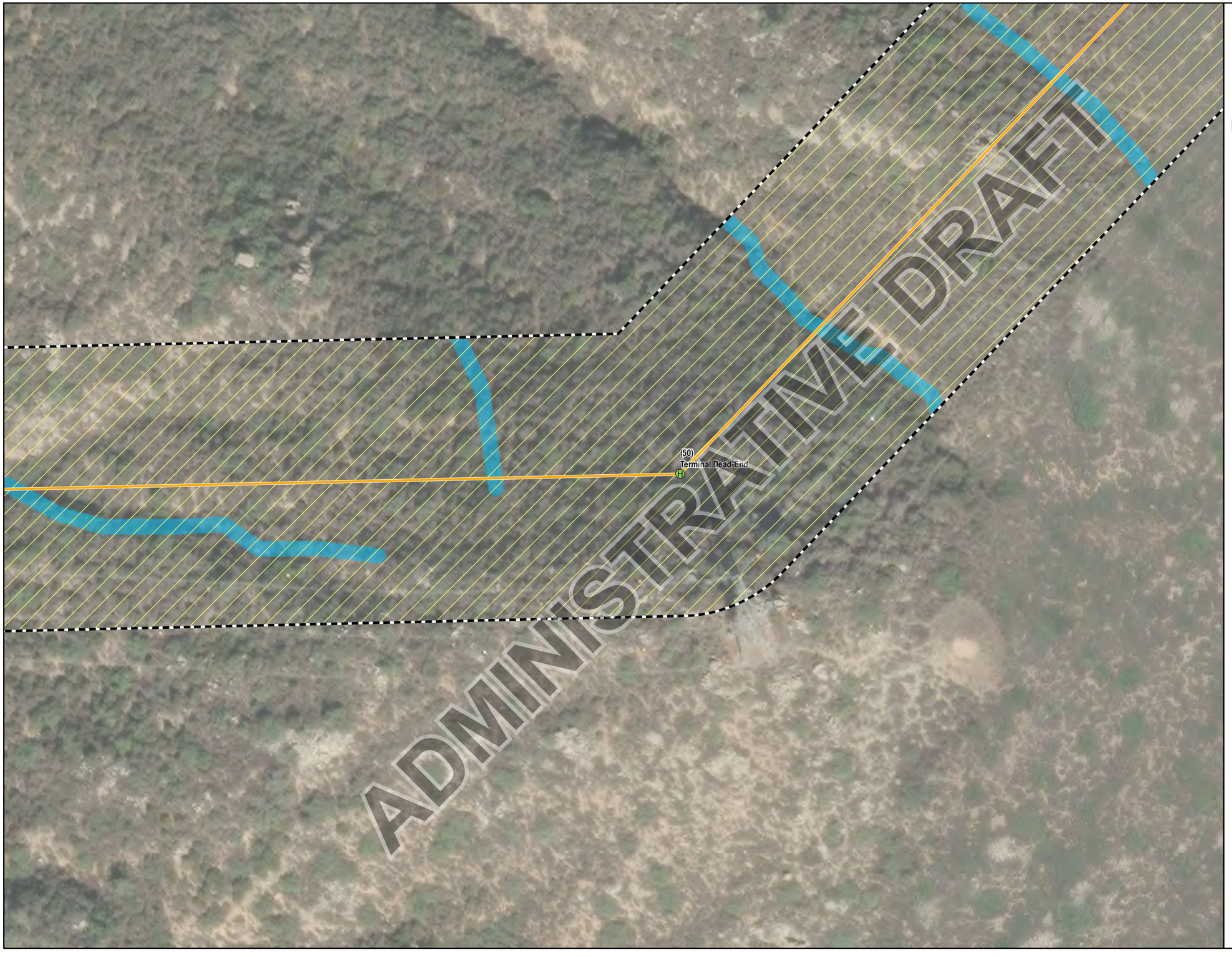
ADMINISTRATIVE DRAFT

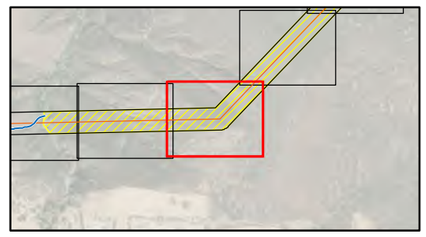


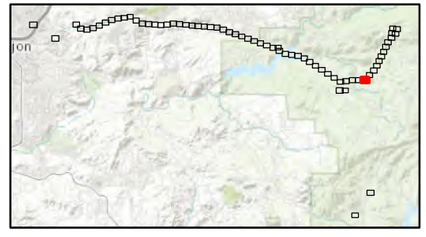
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 49 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





1:1,200

0 100 200 Feet

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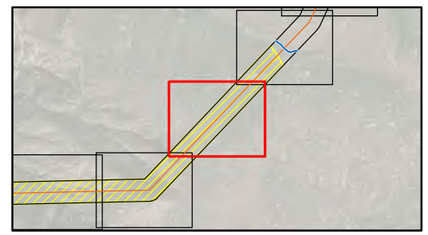
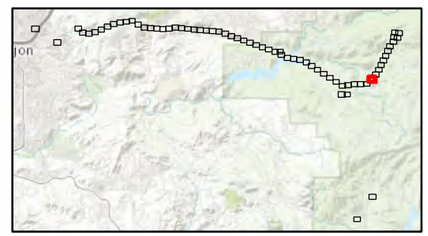
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 50 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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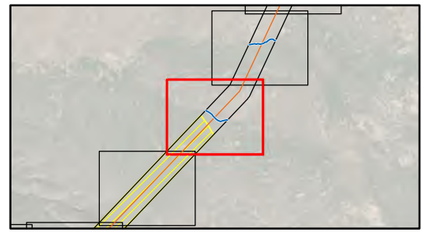
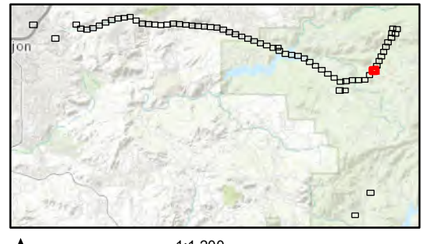
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 51 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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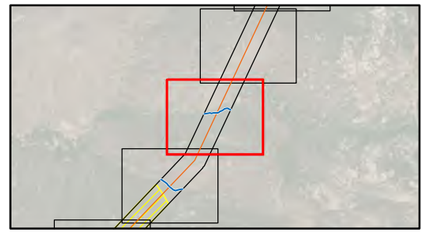
ADMINISTRATIVE DRAFT

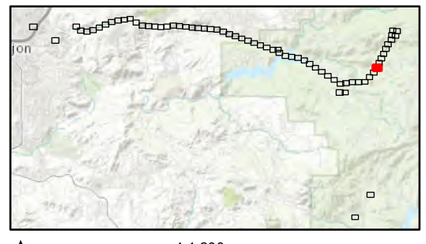
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 52 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment





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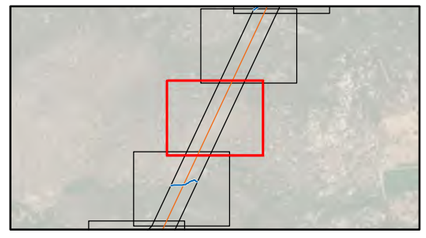
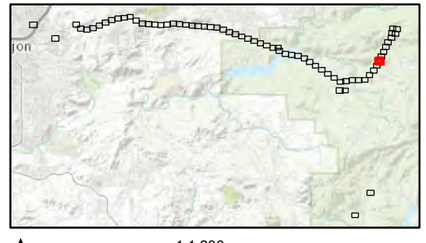
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 53 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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SDGE

JD-088

(54)
Strain Dead-End

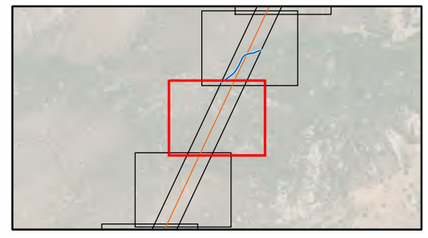
ADMINISTRATIVE DRAFT

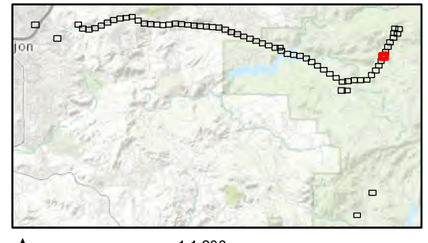
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 54 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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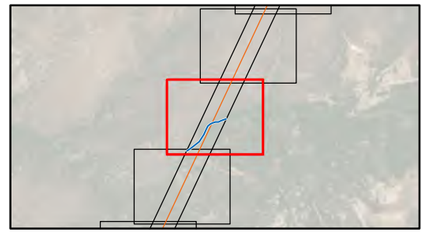
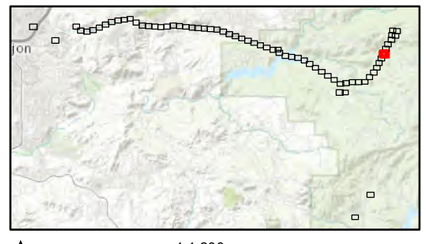
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 55 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment





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0 100 200 Feet

SDGE

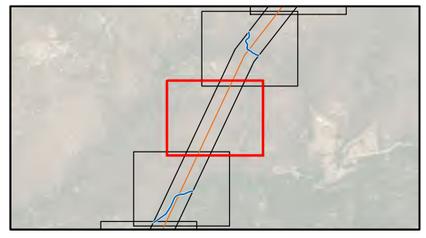
ADMINISTRATIVE DRAFT

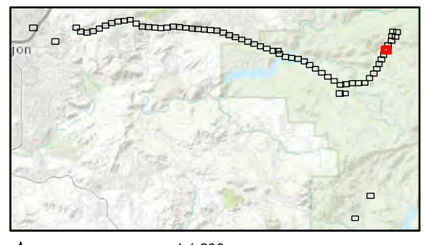
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 56 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Proposed Helicopter Pole
Proposed 230 kV OH Segment





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0 100 200 Feet

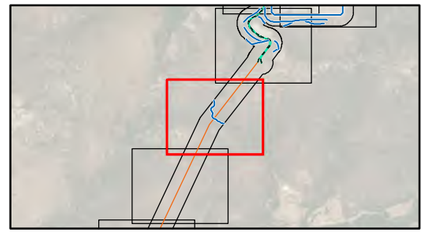
SDGE

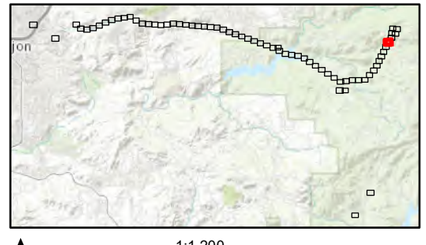
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 57 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment





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0 100 200 Feet

SDGE

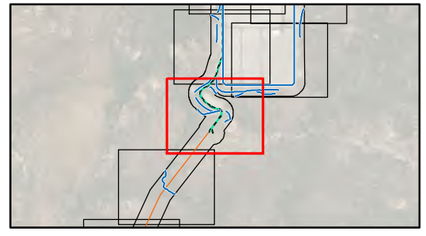
Attachment 3.5-B:
Aquatic Resources within the Survey Area

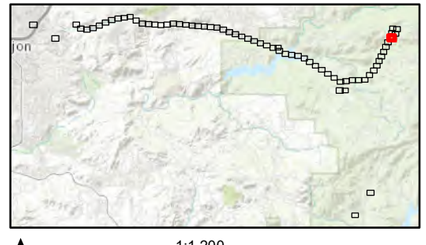
Map 58 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Vault

JD-097
JD-094
JD-104
JD-096
JD-095
JD-094
JD-093
JD-092
JD-091
JD-090
(57-A) Cable Pole
(57-B) Cable Pole





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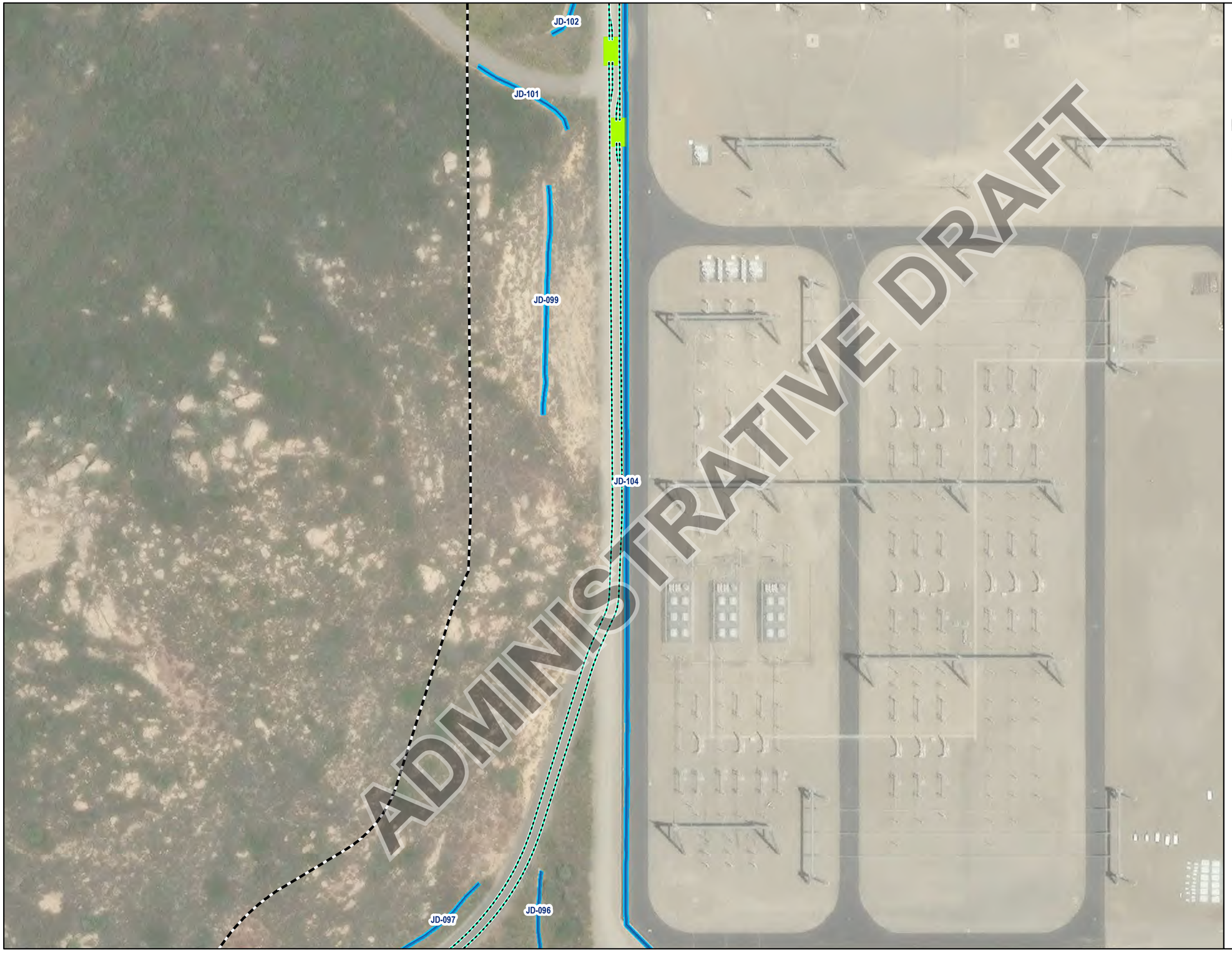
ADMINISTRATIVE DRAFT



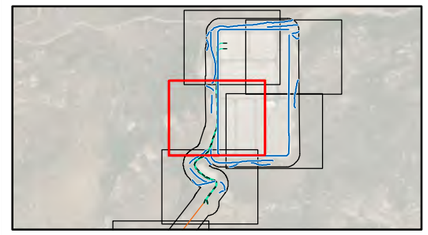
ADMINISTRATIVE DRAFT

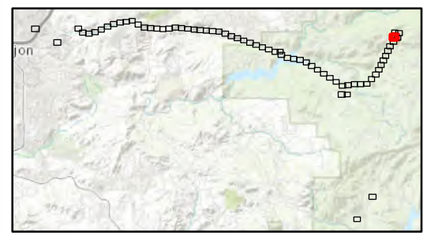
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 59 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Eastern UG Segment
- Vault





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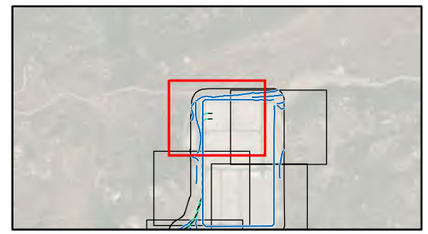
ADMINISTRATIVE DRAFT

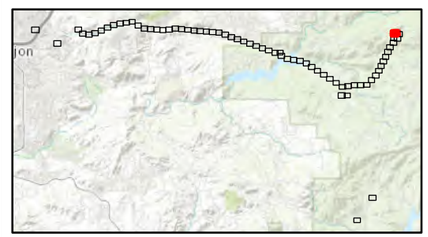
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 60 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Eastern UG Segment
- Vault





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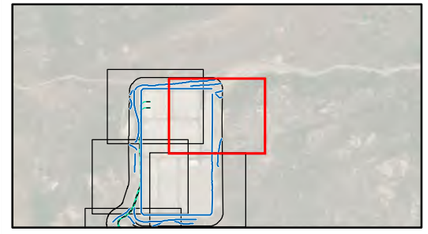
ADMINISTRATIVE DRAFT

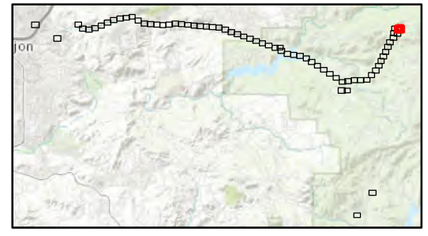
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 61 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank





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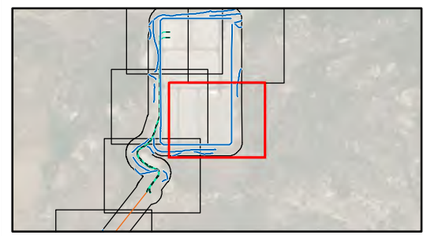
ADMINISTRATIVE DRAFT

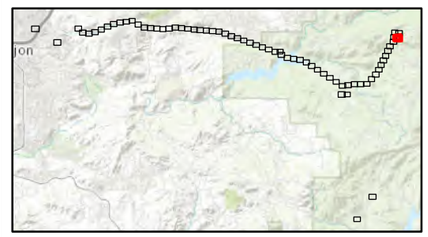
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 62 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank





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0 100 200 Feet

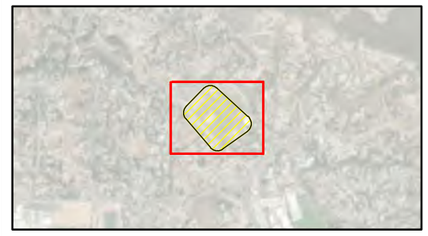
SDGE

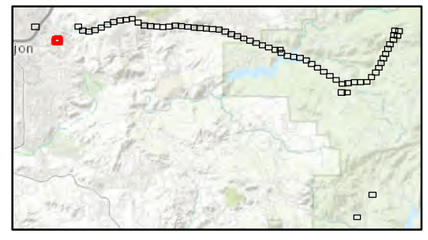
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 63 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed





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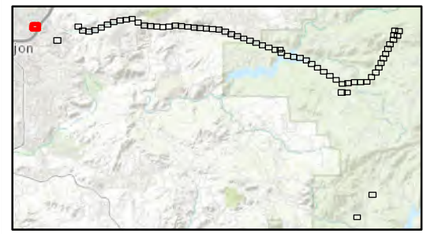
SDGE

Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 64 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed



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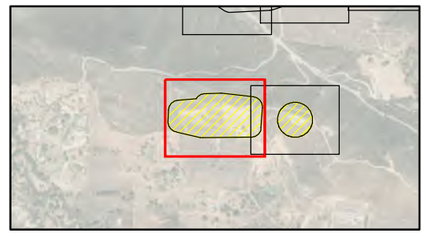
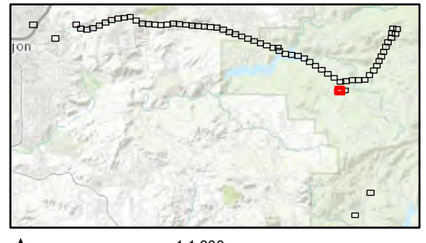
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 65 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed





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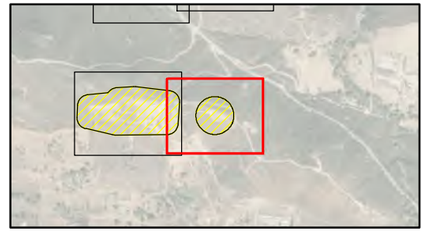
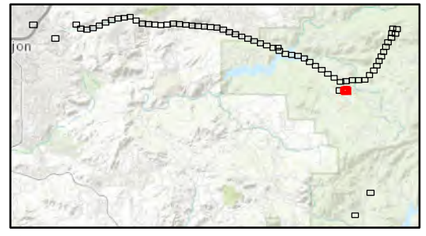
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 66 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
NWI Feature (Freshwater Pond)





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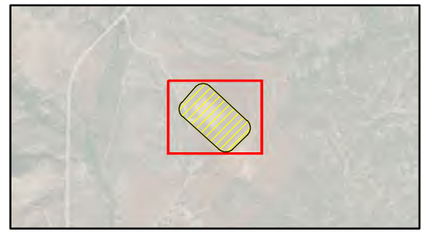
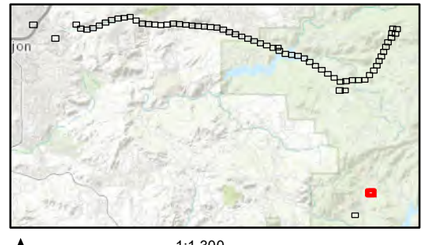
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 67 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
NWI Feature (Riverine)





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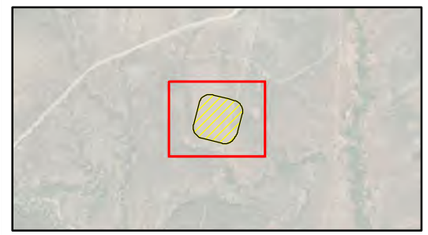
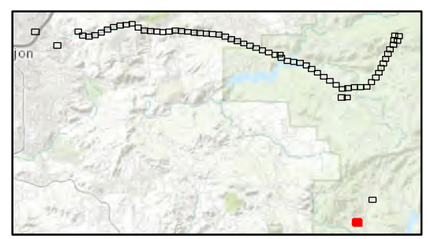
Attachment 3.5-B:
Aquatic Resources within the Survey Area

Map 68 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed





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ATTACHMENT 3.5-C: SPECIAL-STATUS PLANT SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE SURVEY AREA

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ATTACHMENT 3.5-C: SPECIAL-STATUS PLANT SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE SURVEY AREA

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Abronia villosa var. *aurita*	Chaparral sand-verbena	1B.1, USFSS	No	This species occurs within sandy areas in chaparral, coastal sage scrub, and desert dune habitats from 245 to 5,250 feet in elevation (CNPS 2025b).	(January) March to September	Annual herb	Low-quality suitable habitat consisting of buckwheat scrub, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Acanthomintha ilicifolia	San Diego thornmint	FT, SE, 1B.1	Yes	This species occurs within openings of clay soils within chaparral, coastal sage scrub, valley and foothill grassland, and vernal pool habitats from 35 to 3,150 feet in elevation (CNPS 2025b).	April to June	Annual herb	Low-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. Clay soils are not mapped within the survey area; however, clay lenses may occur in small areas within the survey area. The nearest and most recent CNDDB record of this species was documented in 2021 within one mile of the survey area. The nearest and most recent SanBIOS record of this species was documented in 2001 within 3.6 miles of the survey area. **Low Potential**
Allium marvinii	Yucaipa onion	1B.2, USFSS	No	This species occurs within clay soils and openings within chaparral habitat from 2,495 to 3,495 feet in elevation (CNPS 2025b).	April to May	Perennial bulbiferous herb	Low-quality suitable habitat consisting of chaparral is located within the survey area. Clay soils are not mapped within the survey area; however, clay lenses may occur in small areas within the survey area. The nearest recent CNDDB record of this species was documented in 2018 within 2.3 miles of the survey area. The nearest historic CNDDB record of this species was documented in 1994 within 3.6 miles of the survey area. **Low Potential**
Ambrosia monogyra	Singlewhorl burrobrush	2B.2	No	This species occurs within chaparral and Sonoran desert scrub habitats from 35 to 1,640 feet in elevation (CNPS 2025b).	August to November	Perennial shrub	Low-quality suitable habitat consisting of chaparral is located within the survey area. One CNDDB record of this species was documented in 1970 within 4.4 miles of the survey area. **Low Potential**

[1] Explanation of federal and state listing codes:

Federal listing codes:

-FE: Federally listed as endangered
-FT: Federally listed as threatened
-USFSS: USFS Sensitive

State listing codes:

-SE: State-listed as endangered
-SR: State-listed as rare

CNPS CRPRs:

-1B: Rare, threatened, or endangered in California and elsewhere
-2B: Rare, threatened, or endangered in California, but more common elsewhere
-3: Needs review; plants about which more information is needed
-4: Uncommon in California and of limited distribution; a watch list

CRPR Threat Codes:

-0.1: Seriously threatened in California (over 80 percent of occurrences threatened, with a high degree and immediacy of threat)
-0.2: Moderately threatened in California (20 to 80 percent occurrences threatened, with a moderate degree and immediacy of threat)
-0.3: Not very threatened in California (less than 20 percent of occurrences threatened, with a low degree and immediacy of threat or no current threats known)

[2] Months included in parentheses are uncommon.

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Ambrosia pumila	San Diego ambrosia	1B.1, FE	Yes	This species occurs within chaparral, coastal sage scrub, valley and foothill grassland, and vernal pool habitats from 65 to 1,360 feet in elevation (CNPS 2025b).	April to October	Perennial rhizomatous herb	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 2009 within 1.7 miles of the survey area. The most recent CNDDB record of this species was documented in 2019 within 4.3 miles of the survey area. **Moderate Potential**
Arctostaphylos rainbowensis	Rainbow manzanita	1B.1, USFSS	No	This species occurs within chaparral habitat from 675 to 2,200 feet in elevation (CNPS 2025b).	December to March	Perennial evergreen shrub	Low-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Artemisia palmeri	San Diego sagewort	4.2	No	This species occurs within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats from 15 to 3,000 feet in elevation (CNPS 2025b).	(February) May to September	Perennial deciduous shrub	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, coastal scrub, riparian forest, coast live oak riparian forest, and riparian woodland is located within the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. The nearest historic CNDDB record of this species was documented in 1997 within less than 0.1 mile of the survey area. One SanBIOS record of this species was documented in 2012 within 0.3 mile of the survey area. The nearest Sweetwater Authority record of this species was documented in 2015 within the survey area. Additionally, this species was observed during the 2025 field survey. **Present**
Asplenium vespertinum	Western spleenwort	4.2	No	This species occurs within chaparral, cismontane woodland, and coastal scrub habitats from 590 to 3,280 feet in elevation (CNPS 2025b).	February to June	Perennial rhizomatous herb	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. The nearest CNDDB record of this species was documented in 2025 within 3.4 miles of the survey area. **Moderate Potential**
Astragalus deanei	Dean's milk-vetch	1B.1, USFSS	No	This species occurs within chaparral, cismontane woodland, coastal sage scrub, and riparian forest habitats from 245 to 2,280 feet in elevation (CNPS 2025b).	February to May	Perennial herb	High-quality suitable habitat consisting of woodlands, chaparral, coastal sage/chaparral mix, coastal sage scrub, riparian forest, and coast live oak riparian forest is located within the survey area. The nearest CNDDB record of this species was documented in an unknown year within 1.5 miles of the survey area. The most recent CNDDB record of this species was documented in 2016 within 2.6 miles of the survey area. **Moderate Potential**
Astragalus douglasii var. *perstrictus*	Jacumba milk-vetch	1B.2, USFSS	No	This species occurs within chaparral, cismontane woodland, pinyon and juniper woodland, riparian scrub, and valley and foothill grassland habitats from 2,955 to 4,495 feet in elevation (CNPS 2025b).	April to June	Perennial herb	Low-quality suitable habitat consisting of woodlands, chaparral, and non-native grassland is located within the survey area. The elevation of the survey area is located within the typical elevation range for this species. The nearest CNDDB record of this species was documented in 1935 within 3.7 miles of the survey area. The most recent CNDDB record of this species was documented in 2010 within 4.8 miles of the survey area. **Low Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Astragalus oocarpus	San Diego milk-vetch	1B.2, USFSS	No	This species occurs within chaparral and cismontane woodland habitats from 1,000 to 5,000 feet in elevation (CNPS 2025b).	May to August	Perennial herb	High-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. The nearest historic CNDDB record of this species was documented in 1994 within 1.8 miles of the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. **High Potential**
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	1B.1, USFSS	No	This species occurs within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats from 1,200 to 3,200 feet in elevation (CNPS 2025b).	December to June	Perennial shrub	Low-quality suitable habitat consisting of woodlands, non-native grassland, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Atriplex parishii	Parish's bristlescale	1B.1, USFSS	No	This species occurs within alkaline soils in chenopod scrub, playas, grassland, and vernal pool habitats from 80 to 6,235 feet in elevation (CNPS 2025b).	June to October	Annual herb	No suitable habitat is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Baccharis vanessae	Encinitas baccharis	1B.1, FT, SE	Yes	This species occurs within maritime chaparral and cismontane woodland habitats from 195 to 2,360 feet in elevation (CNPS 2025b). Previously, this species was thought to be restricted to sandstone soils in maritime chaparral, but it has since been observed in a wide variety of chaparral habitats. This species has been observed to occur on the following soil types: Cieneba series, Corralitos loamy sand alluvial Huerhuero, San Miguel Exchequer, granitic, andesite rock outcrops, and soils derived from acid igneous rock (USFWS 2011).	August to November	Perennial deciduous shrub	Moderate-quality suitable habitat for this species consisting of chaparral habitat within Cieneba series soils is located within the survey area. One CNDDB record of this species was documented in 2017 within 1.6 miles of the survey area. **Moderate Potential**
Bahiopsis laciniata	San Diego County viguiera	4.3	No	This species occurs within chaparral and coastal scrub habitat from 195 to 2,460 feet in elevation (CNPS 2025b).	February to June (August)	Perennial shrub	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. The nearest and most recent SanBIOS record of this species was documented in 2012 within 0.2 mile of the survey area. The nearest CNF ESRP record of this species was documented in 2010 within the survey area. Additionally, this species was observed during the 2025 field survey. **Present**
Berberis nevinii	Nevin's barberry	1B.1, FE, SE	No	This species occurs within chaparral, cismontane woodland, coastal sage scrub, and riparian scrub from 230 to 2,705 feet in elevation (CNPS 2025b).	(February) March to June	Perennial evergreen shrub	Low-quality suitable habitat consisting of woodlands, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Bloomeria clevelandii	San Diego goldenstar	1B.1	No	This species occurs within chaparral, coastal sage scrub, valley and foothill grassland, and vernal pool habitats from 165 to 1,525 feet in elevation (CNPS 2025b).	April to May	Perennial bulbiferous herb	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 2017 within 1.4 miles of the survey area. **Moderate Potential**
Brodiaea filifolia	Thread leaved brodiaea	1B.1, FT, SE	Yes	This species occurs within chaparral, cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, and vernal pool habitat from 80 to 3,675 feet in elevation (CNPS 2025b).	March to June	Perennial bulbiferous herb	Low-quality suitable habitat consisting of woodlands, non-native grassland, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. Additionally, the survey area is outside of the typical range for this species. **Low Potential**
Brodiaea orcuttii	Orcutt's brodiaea	1B.1, USFSS	No	This species occurs within vernal pools, chaparral, cismontane woodland, closed-cone coniferous forest, meadows and seeps, valley and foothill grassland habitats from 100 to 5,550 feet in elevation (CNPS 2025b).	May to July	Perennial bulbiferous herb	Moderate-quality suitable habitat consisting of woodlands, non-native grassland, and chaparral is located within the survey area. The nearest recent CNDDB record of this species was documented in 2010 within 0.5 mile of the survey area. The nearest CNF ESRP record of this species was documented in an unknown year within 0.7 mile of the survey area. **High Potential**
Calandrinia breweri	Brewer's calandrinia	4.2	No	This species occurs within chaparral and coastal sage scrub habitats from 35 to 4,005 feet in elevation (CNPS 2025b).	(January) March to June	Annual herb	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. The nearest CNF ESRP record of this species was documented in 2016 within 0.7 mile of the survey area. **High Potential**
Calochortus dunnii	Dunn's mariposa lily	1B.2, SR, USFSS	No	This species occurs within chaparral, closed-cone coniferous forest, and valley and foothill grassland habitats from 605 to 6,005 feet in elevation (CNPS 2025b).	(February) April to June	Perennial bulbiferous herb	High-quality suitable habitat consisting of non-native grassland and chaparral is located within the survey area. The nearest recent CNDDB record of this species was documented in 2010 within the survey area. The nearest CNF ESRP record of this species was documented in an unknown year within the survey area. **High Potential**
Calochortus weedii var. *intermedius*	Intermediate mariposa-lily	1B.2, USFSS	No	This species occurs within chaparral, coastal scrub, and valley and foothill grassland habitats from 345 to 2,805 feet in elevation (CNPS 2025b).	May to July	Perennial bulbiferous herb	Low-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Camissoniopsis lewisii	Lewis' evening-primrose	3	No	This species occurs within coastal bluff scrub, cismontane woodland, coastal dunes and scrub, and valley and foothill grassland habitats from sea level to 985 feet in elevation (CNPS 2025b).	March to May (June)	Annual herb	Low-quality suitable habitat consisting of woodlands, coastal sage scrub, and non-native grassland is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Carex obispoensis	San Luis Obispo sedge	1B.2, USFSS	No	This species occurs within chaparral, closed-cone coniferous forest, coastal prairie, coastal sage scrub, and valley and foothill grassland habitats from 35 to 2,690 feet in elevation (CNPS 2025b).	April to June	Perennial cespitose herb	High-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No historic CNDDB records of this species have been documented within five miles of the survey area. The nearest recent CNDDB record of this species was documented in 2016 within 3.6 miles of the survey area. **Moderate Potential**
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	1B.2, USFSS	No	This species occurs within chaparral, meadows and seeps, pebble plain, riparian woodland, and upper montane coniferous forest habitats from 4,265 to 7,840 feet in elevation (CNPS 2025b).	May to August	Annual herb (hemiparasitic)	Although chaparral and riparian woodland habitats are located within the survey area, the survey area is outside of the elevation range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Castilleja plagiotoma	Mojave Indian paintbrush	4.3, USFSS	No	This species occurs within Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland from 985 to 8,205 feet in elevation (CNPS 2025b).	April to June	Perennial herb (hemiparasitic)	No suitable habitat is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Caulanthus simulans	Payson's jewel-flower	4.2, USFSS	No	This species occurs within chaparral and coastal scrub habitats from 295 to 7,220 feet in elevation (CNPS 2025b).	(February) March to May (June)	Annual herb	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Ceanothus cyaneus	Lakeside ceanothus	1B.2, USFSS	No	This species occurs within chaparral and closed-cone coniferous forest habitats from 770 to 2,475 feet in elevation (CNPS 2025b).	April to June	Perennial evergreen shrub	High-quality suitable habitat consisting of chaparral is located within the survey area. The nearest recent CNDDB record of this species was documented in 2014 within 0.8 mile of the survey area. The nearest and most recent SanBIOS record of this species was documented in 2021 within five miles of the survey area. **High Potential**
Ceanothus foliosus var. *viejasensis*	Viejas Mountain ceanothus	1B.2	No	This species occurs within chaparral habitat from 2,575 to 4,495 feet in elevation (CNPS 2025b).	March to June	Perennial shrub	Moderate-quality suitable habitat consisting of chaparral is located within the survey area. The nearest and most recent CNDDB record of this species was documented in 2017 within 3.2 miles of the survey area. **Moderate Potential**
Centromadia pungens ssp. *laevis*	Smooth tarplant	1B.1	No	This species occurs within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland habitats from sea level to 2,100 feet in elevation (CNPS 2025b).	April to September	Annual herb	Low-quality suitable habitat consisting of non-native grassland and riparian woodland is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Chamaebatia australis	Southern mountain misery	4.2	No	This species occurs within chaparral (gabbroic metavolcanic) habitats from 985 to 3,345 feet in elevation (CNPS 2025b).	November to May	Perennial evergreen shrub	Low-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Chorizanthe leptotheca	Peninsular spineflower	4.2	No	This species occurs within chaparral, coastal scrub, and lower montane coniferous forest habitats from 985 to 6,235 feet in elevation (CNPS 2025b).	May to August	Annual herb	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. **High Potential**
Chorizanthe parryi var. *parryi*	Parry's spineflower	1B.1, USFSS	No	This species occurs within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats from 900 to 4,005 feet in elevation (CNPS 2025b).	April to June	Annual herb	High-quality suitable habitat consisting of woodlands, non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Chorizanthe polygonoides var. *longispina*	Long-spined spineflower	1B.2	No	This species occurs within chaparral, coastal sage scrub, meadows and seeps, valley and foothill grassland, and vernal pool habitats from 100 to 5,020 feet in elevation (CNPS 2025b).	April to July	Annual herb	High-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 1993 within 2.5 miles of the survey area. The most recent CNDDB record of this species was documented in 1995 within 3.3 miles of the survey area. **Moderate Potential**
Clarkia delicata	Delicate clarkia	1B.2	No	This species occurs within chaparral and cismontane woodland habitats from 770 to 3,280 feet in elevation (CNPS 2025b).	April to June	Annual herb	High-quality suitable habitat consisting of chaparral and woodlands is located within the survey area. The nearest recent CNDDB record of this species was documented in 2010 within the survey area. The nearest and most recent SanBIOS record of this species was documented in 2017 within four miles of the survey area. This species was observed during the 2025 field survey. **Present**
Clinopodium chandleri	San Miguel savory	1B.2, USFSS	No	This species occurs within chaparral, cismontane woodland, coastal sage scrub, riparian woodland, and valley and foothill grassland habitats from 395 to 3,525 feet in elevation (CNPS 2025b).	March to July	Perennial shrub	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, coastal sage scrub, and woodlands is located within the survey area. One CNDDB record of this species was documented in 2020 within 3.9 miles of the survey area. **Moderate Potential**
Comarostaphylis diversifolia ssp. *diversifolia*	Summer holly	1B.2	No	This species occurs within chaparral and cismontane woodland habitats from 100 to 2,590 feet in elevation (CNPS 2025b).	April to June	Perennial evergreen shrub	Moderate-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Convolvulus simulans	Small-flowered morning-glory	4.2	No	This species occurs within chaparral, coastal scrub, and valley and foothill grassland habitats from 100 to 2,430 feet in elevation (CNPS 2025b).	March to July	Annual herb	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Cordylanthus rigidus ssp. *brevibracteatus*	Short-bracted bird's-beak	4.3	No	This species occurs within chaparral, lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest habitats from 2,000 to 8,500 feet in elevation (CNPS 2025b).	July to August (September)	Annual herb (hemiparasitic)	Moderate-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Deinandra floribunda	Tecate tarplant	1B.2, USFSS	No	This species occurs within chaparral and coastal scrub habitats from 230 to 4,005 feet in elevation (CNPS 2025b).	August to October	Annual herb	Low-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Deinandra mohavensis	Mojave tarplant	1B.3, SE, USFSS	No	This species occurs within chaparral, coastal scrub, and riparian scrub habitats from 2,100 to 5,250 feet in elevation (CNPS 2025b).	(January to May) June to October	Annual herb	Low-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Delphinium hesperium ssp. *cuyamacae*	Cuyamaca larkspur	1B.2, SR, USFSS	No	This species occurs within lower montane coniferous forest, meadows and seeps, and vernal pool habitats from 4,005 to 5,350 feet in elevation (CNPS 2025b).	May to July	Perennial herb	No suitable habitat is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. Additionally, the survey area is outside of the elevation range of this species. **Absent**
Delphinium parishii ssp. *subglobosum*	Colorado Desert larkspur	4.3	No	This species occurs within chaparral, cismontane woodland, pinyon and juniper woodland, and Sonoran desert scrub habitats from 1,970 to 5,905 feet in elevation (CNPS 2025b).	March to June	Perennial herb	Low-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Dieteria asteroides var. *lagunensis*	Mount Laguna aster	2B.1, SR, USFSS	No	This species occurs within cismontane woodland and lower montane coniferous forest habitats from 2,590 to 7,875 feet in elevation (CNPS 2025b).	(May) July to August	Perennial herb	Although oak woodlands are located within the survey area, the survey area is outside of the typical range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Diplacus clevelandii	Cleveland's bush monkeyflower	4.2	No	This species occurs within chaparral, cismontane woodland, and lower montane coniferous forest habitats from 1,475 to 6,560 feet in elevation (CNPS 2025b).	April to June	Perennial rhizomatous herb	Moderate-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Dudleya multicaulis	Many-stemmed dudleya	1B.2, USFSS	No	This species occurs within chaparral, coastal scrub, and valley and foothill grassland habitats from 50 to 2,590 feet in elevation (CNPS 2025b).	April to July	Perennial herb	Low-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Dudleya variegata	Variegated dudleya	1B.2	No	This species occurs within chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland, and vernal pool habitats from 10 to 1,905 feet in elevation (CNPS 2025b).	April to June	Perennial herb	Moderate-quality suitable habitat consisting of woodlands, non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest and most recent CNDDB record of this species was documented in 2018 within 1.4 miles of the survey area. **Moderate Potential**
Dudleya viscida	Sticky dudleya	1B.2, USFSS	No	This species occurs within coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub habitats from 35 to 1,805 feet in elevation (CNPS 2025b).	May to June	Perennial herb	Low-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Ericameria palmeri var. *palmeri*	Palmer's goldenbush	1B.1	No	This species occurs within chaparral and coastal sage scrub habitats from 100 to 1,970 feet in elevation (CNPS 2025b).	(July) September to November	Perennial evergreen shrub	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 2002 within 0.4 mile of the survey area. The nearest recent CNDDB record of this species was documented in 2005 within 4.7 miles of the survey area. One Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. This species was observed during the 2025 field survey. **Present**
Eriogonum evanidum	Vanishing wild buckwheat	1B.1, USFSS	No	This species occurs within chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland habitats from 3,610 to 7,300 feet in elevation (CNPS 2025b).	July to October	Annual herb	Although woodland and chaparral habitat is located within the survey area, the survey area is outside of the elevation range of this species. One CNDDB record of this species was documented in an unknown year within 1.5 miles of the survey area. **Absent**
Eryngium aristulatum var. *parishii*	San Diego button celery	1B.1, FE, SE	Yes	This species occurs within coastal sage scrub, valley and foothill grassland, and vernal pool habitats from 65 to 2,035 feet in elevation (CNPS 2025b).	April to June	Annual/ perennial herb	Low-quality suitable habitat consisting of non-native grassland and coastal sage scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Erythranthe diffusa	Palomar monkeyflower	4.3	No	This species occurs within chaparral and lower montane coniferous forest habitats from 4,005 to 6,005 feet in elevation (CNPS 2025b).	April to June	Annual herb	Although chaparral habitat is located within the survey area, the survey area is outside of the elevation range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Euphorbia abramsiana	Abrams' spurge	2B.2	No	This species occurs within Mojavean desert scrub and Sonoran desert scrub habitats from -15 to 4,300 feet in elevation (CNPS 2025b).	(August) September to November	Annual herb	No suitable habitat is located within the survey area. One CNDDB record of this species was documented in 1963 within 1.5 miles of the survey area. **Absent**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Ferocactus viridescens	San Diego barrel cactus	2B.1	No	This species occurs within chaparral, coastal sage scrub, valley and foothill grassland, and vernal pool habitats from 10 to 1,475 feet in elevation (CNPS 2025b).	May to June	Perennial stem succulent	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. One CNDDB record of this species was documented in 1995 within 4.7 miles of the survey area. **Moderate Potential**
Fremontodendron mexicanum	Mexican flannelbush	1B.1, FE, SR	No	This species occurs within chaparral, cismontane woodland, and closed-cone coniferous forest habitats from 35 to 2,350 feet in elevation (CNPS 2025b).	March to June	Perennial evergreen shrub	Moderate-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Galium angustifolium ssp. *jacinticum*	San Jacinto Mountains bedstraw	1B.3, USFSS	No	This species occurs within lower montane coniferous forest habitat from 4,430 to 6,890 feet in elevation (CNPS 2025b).	June to August	Perennial herb	No suitable habitat is located within the survey area and the survey area is outside of the elevation range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Geraea viscida	Sticky geraea	2B.2	No	This species occurs within chaparral habitat, often in disturbed areas, from 1,475 to 5,580 feet in elevation (CNPS 2025b).	(April) May to June	Perennial herb	High-quality suitable habitat consisting of chaparral is located within the survey area. The nearest CNDDB record of this species was documented in 1971 within 0.7 mile of the survey area. The nearest recent CNDDB record of this species was documented in 2005 within 3.4 miles of the survey area. **Moderate Potential**
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	3.1	No	This species occurs within chaparral habitat, often in disturbed areas or mesic areas, from 1,475 to 2,295 feet in elevation (CNPS 2025b).	April to June	Annual herb	High-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Grindelia hirsutula var. *hallii*	San Diego gumplant	1B.2	No	This species occurs within chaparral, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland habitats from 605 to 5,725 feet in elevation (CNPS 2025b).	May to October	Perennial herb	Low-quality suitable habitat consisting of non-native grassland and chaparral is located within the survey area. One CNDDB record of this species was documented in 1976 within 3.4 miles of the survey area. **Low Potential**
Harpagonella palmeri	Palmer's grapplinghook	4.2	No	This species occurs within chaparral, coastal sage scrub, and valley and foothill grassland from 65 to 3,135 feet in elevation (CNPS 2025b).	March to May	Annual herb	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. The nearest historic CNDDB record of this species was documented in 1992 within three miles of the survey area. **Moderate Potential**
Hesperocyparis forbesii	Tecate cypress	1B.1, USFSS	No	This species occurs within closed-cone coniferous forest and chaparral habitats from 260 to 4,920 feet in elevation (CNPS 2025b).	Not applicable	Perennial evergreen tree	Moderate-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Hesperocyparis stephensonii	Cuyamaca cypress	1B.1, USFSS	No	This species occurs within closed-cone coniferous forest, chaparral, cismontane woodland, and riparian forest habitats from 3,395 to 5,595 feet in elevation (CNPS 2025b).	Not applicable	Perennial evergreen tree	Although chaparral, riparian forest, and woodlands habitats are located within the survey area, the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Heuchera abramsii	Abrams' alumroot	4.3, USFSS	No	This species occurs within rocky upper montane coniferous forest habitat from 9,185 to 11,485 feet in elevation (CNPS 2025b).	July to August	Perennial rhizomatous herb	No suitable habitat is located within the survey area, and the survey area is outside of the elevation range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Holocarpha virgata ssp. *elongata*	Graceful tarplant	4.2	No	This species occurs within the chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats from 195 to 3,610 feet in elevation (CNPS 2025b).	May to November	Annual herb	Moderate-quality suitable habitat consisting of woodlands, non-native grassland, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Hordeum intercedens	Vernal barley	3.2	No	This species occurs within the coastal dunes, coastal scrub, valley and foothill grassland (depressions, saline flats), and vernal pool habitats from 15 to 3,280 feet in elevation (CNPS 2025b).	March to June	Annual herb	Moderate-quality suitable habitat consisting of non-native grassland and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Horkelia cuneata var. *puberula*	Mesa horkelia	1B.1, USFSS	No	This species occurs within maritime chaparral, cismontane woodland, and coastal scrub habitats from 230 to 2,660 feet in elevation (CNPS 2025b).	Feb to July (September)	Perennial herb	Low-quality suitable habitat consisting of woodlands, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Horkelia truncata	Ramona horkelia	1B.3, USFSS	No	This species occurs within chaparral and cismontane woodland habitats from 1,310 to 4,265 feet in elevation (CNPS 2025b).	May to June	Perennial herb	High-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. The nearest recent CNDDB record of this species was documented in 2015 within 1.5 miles of the survey area. The nearest CNDDB record of this species was documented in 1938 within the survey area. The nearest and most recent SanBIOS record of this species was documented in 2001 within 2.8 miles of the survey area. **Moderate Potential**
Hulsea californica	San Diego sunflower	1B.3	No	This species occurs within chaparral, lower montane coniferous forest, and upper montane coniferous forest habitats from 3,000 to 9,565 feet in elevation (CNPS 2025b).	April to June	Perennial herb	Moderate-quality suitable habitat consisting of chaparral is located within the survey area. The nearest CNDDB record of this species was documented in 1994 within 3.2 miles of the survey area. The nearest recent CNDDB record of this species was documented in 2010 within 4.4 miles of the survey area. The nearest and most recent CNF ESRP record of this species was documented in 2010 within the survey area. **High Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Isocoma menziesii var. *decumbens*	Decumbent goldenbush	1B.2	No	This species occurs within chaparral and coastal sage scrub habitats from 35 to 820 feet in elevation (CNPS 2025b).	April to November	Perennial shrub	Although moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area, the survey area is mostly outside of the elevation range of this species. The nearest CNDDB record of this species was documented in 1930 within 1.6 miles of the survey area. The most recent CNDDB record of this species was documented in 2019 within 2.8 miles of the survey area. **Moderate Potential**
Iva hayesiana	San Diego marsh elder	2B.2	No	This species occurs within marshes and swamps and playa habitats from sea level to 1,640 feet in elevation (CNPS 2025b).	April to October	Perennial herb	No suitable habitat is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. One SanBIOS record of this species was documented in 2017 within 4.3 miles of the survey area. **Absent**
Juglans californica	Southern California black walnut	4.2	No	This species occurs within chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats from 165 to 2,955 feet in elevation (CNPS 2025b).	March to August	Perennial deciduous tree	Moderate-quality suitable habitat consisting of woodlands, chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Juncus acutus ssp. *leopoldii*	Southwestern spiny rush	4.2	No	This species occurs within coastal dunes (mesic), coastal scrub, meadows and seeps (alkaline seeps), and marsh and swamp (coastal salt) habitats from 10 to 2,955 feet in elevation (CNPS 2025b).	(March) May to June	Perennial rhizomatous herb	High-quality suitable habitat consisting of coastal sage scrub is located within the survey area. The most recent Sweetwater Authority record of this species was documented in 2016 within 0.2 mile of the survey area. **High Potential**
Lathyrus splendens	Pride-of-California	4.3	No	This species occurs within chaparral habitat from 655 to 5,005 feet in elevation (CNPS 2025b).	March to June	Perennial herb	Moderate-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Lepechinia ganderi	Gander's pitcher sage	1B.3	No	This species occurs within chaparral, closed-cone coniferous forest, coastal sage scrub, and valley and foothill grassland habitats from 1,000 to 3,295 feet in elevation (CNPS 2025b).	June to July	Perennial shrub	Moderate-quality suitable habitat consisting of non-native grassland, chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. One CNDDB record of this species was documented in 1986 within 3.8 miles of the survey area. **Moderate Potential**
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	4.3	No	This species occurs within chaparral and coastal sage scrub habitats from five to 2,905 feet in elevation (CNPS 2025b).	January to July	Annual herb	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest recent CNDDB record of this species was documented in 2006 within the survey area. This species was observed during the 2025 field survey. **Present**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Lessingia glandulifera var. *tomentosa*	Warner Springs lessingia	1B.1, USFSS	No	This species occurs within chaparral (sandy) habitats from 2,855 to 4,005 feet in elevation (CNPS 2025b).	August to October	Annual herb	Low-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Lewisia brachycalyx	Short-sepaled lewisia	2B.2, USFSS	No	This species occurs within lower montane coniferous forest and meadow and seep habitats from 4,495 to 7,545 feet in elevation (CNPS 2025b).	(February) April to June (July)	Perennial herb	No suitable habitat is located within the survey area, and the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Lilium humboldtii ssp. *ocellatum*	Ocellated Humboldt lily	4.2	No	This species occurs within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats from 100 to 5,905 feet in elevation (CNPS 2025b).	March to July (August)	Perennial bulbiferous herb	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, coastal scrub, and woodlands is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Lilium parryi	Lemon lily	1B.2, USFSS	No	This species occurs within lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest habitats from 4,005 to 9,005 feet in elevation (CNPS 2025b).	July to August	Perennial bulbiferous herb	Although riparian forest and coast live oak riparian forest habitats are located within the survey area, the survey area is located outside the elevation range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Limnanthes alba ssp. *parishii*	Parish's meadowfoam	1B.2, SE, USFSS	No	This species occurs within lower montane coniferous forest, meadows and seeps, and vernal pool habitats from 1,970 to 6,560 feet in elevation (CNPS 2025b).	April to June	Annual herb	No suitable habitat is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Linanthus orcuttii	Orcutt's linanthus	1B.3, USFSS	No	This species occurs within openings in chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitats from 3,000 to 7,040 feet in elevation (CNPS 2025b).	May to June	Annual herb	Although chaparral habitats are located within the survey area, the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Mielichhoferia shevockii	Shevock's copper moss	1B.2, USFSS	No	This species occurs within cismontane woodland habitat from 2,460 to 4,595 feet in elevation (CNPS 2025b).	Not applicable	Moss	Although oak woodlands are located within the survey area, the survey area is outside of the typical range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Monardella breweri ssp. *microcephala*	Small-headed monardella	2B.2	No	This species occurs within chaparral, cismontane woodland, and lower montane coniferous forest habitats from 755 to 3,935 feet in elevation (CNPS 2025b).	May to August	Annual herb	Moderate-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. One CNDDB record of this species was documented in 2020 within 0.4 mile of the survey area. **High Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Monardella hypoleuca ssp. *lanata*	Felt-leaved monardella	1B.2, USFSS	No	This species occurs within chaparral and cismontane woodland habitats from 985 to 5,170 feet in elevation (CNPS 2025b).	June to August	Perennial rhizomatous herb	High-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. The nearest CNDDB record of this species was documented in an unknown year within 0.5 mile of the survey area. The most recent CNDDB record of this species was documented in 2019 within 3.8 miles of the survey area. The nearest and most recent SanBIOS record of this species was documented in 2009 within 0.2 mile of the survey area. The nearest recent Sunrise Powerlink Project record of this species was documented in 2009 within 0.2 mile of the survey area. **High Potential**
Monardella macrantha ssp. *hallii*	Hall's monardella	1B.3, USFSS	No	This species occurs within broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland habitats from 2,395 to 7,200 feet in elevation (CNPS 2025b).	June to October	Perennial rhizomatous herb	Low-quality suitable habitat consisting of woodlands, non-native grassland, and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Monardella nana ssp. *leptosiphon*	San Felipe monardella	1B.2, USFSS	No	This species occurs within chaparral and lower montane coniferous forest habitats from 3,935 to 6,085 feet in elevation (CNPS 2025b).	June to July	Perennial rhizomatous herb	Although chaparral habitats are located within the survey area, the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Monardella viminea	Willowy monardella	1B.1, FE, SE	Yes	This species occurs within ephemeral, alluvial washes composed of cobbly substrate that occur within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland habitats from 165 to 740 feet in elevation (CNPS 2025b).	June to August	Perennial herb	Low-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, coastal scrub, riparian forest, coast live oak riparian forest, and riparian woodland is located within the survey area. Additionally, the survey area is outside of the typical range for this species. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Navarretia peninsularis	Baja navarretia	1B.2, USFSS	No	This species occurs within openings in chaparral, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland habitats from 4,920 to 7,545 feet in elevation (CNPS 2025b).	(May) June to August	Annual herb	Although chaparral habitats are located within the survey area, the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Nolina cismontana	Chaparral nolina	1B.2, USFSS	No	This species occurs within chaparral and coastal sage scrub habitats, and sometimes in gabbroic or sandstone soils, from 460 to 4,185 feet in elevation (CNPS 2025b).	(March) May to July	Perennial evergreen shrub	Low-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage is located within the survey area. However, gabbroic soils do not occur within the survey area. The most recent and nearest CNDDB record of this species was documented in 2010 within 2.9 miles of the survey area. One SanBIOS record of this species was documented in 2001 within 3.2 miles of the survey area. **Low Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Nolina interrata	Dehesa nolina	1B.1, SE	Yes	This species occurs within chaparral habitat (often in gabbroic, metavolcanic, or serpentinite soils(from 605 to 2,805 feet in elevation (CNPS 2025b).	June to July	Perennial herb	Low-quality suitable habitat consisting of chaparral is located within the survey area. However, gabbroic soils do not occur within the survey area. The nearest recent CNDDB record of this species was documented in 2020 within 1.3 miles of the survey area. **Low Potential**
Packera ganderi	Gander's ragwort	1B.2, USFSS, SR	No	This species occurs within chaparral habitat from 1,310 to 3,935 feet in elevation (CNPS 2025b).	April to June	Perennial herb	High-quality suitable habitat consisting of chaparral is located within the survey area. The nearest and most recent CNDDB record of this species was documented in 2010 within 3.2 miles of the survey area. The nearest and most recent SanBIOS record of this species was documented in 2001 within 3.2 miles of the survey area. **Moderate Potential**
Penstemon californicus	California beardtongue	1B.2, USFSS	No	This species occurs within chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitats from 3,840 to 7,545 feet in elevation (CNPS 2025b).	May to June (August)	Perennial herb	Although chaparral habitats are located within the survey area, the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Pentachaeta aurea ssp. *aurea*	Golden-rayed pentachaeta	4.2	No	This species occurs within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grassland habitats from 260 to 6,070 feet in elevation (CNPS 2025b).	March to July	Annual herb	Moderate-quality suitable habitat consisting of woodlands, non-native grassland, chaparral, coastal sage/chaparral mix, coastal scrub, and riparian woodland is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Pentagramma rebmanii	Rebman's silverback fern	1B.3	No	This species occurs within chaparral, cismontane woodland, and riparian woodland habitats from 575 to 5,775 feet in elevation (CNPS 2025b).	Not applicable	Perennial rhizomatous herb	High-quality suitable habitat consisting of chaparral and woodlands is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Phacelia keckii	Santiago Peak phacelia	1B.3, USFSS	No	This species occurs within closed-cone coniferous forest and chaparral habitats from 1,790 to 5,250 feet in elevation (CNPS 2025b).	May to July	Annual herb	Low-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Low Potential**
Pickeringia montana var. *tomentosa*	Woolly chaparral-pea	4.3	No	This species occurs within chaparral habitats from sea level to 5,580 feet in elevation (CNPS 2025b).	May to August	Evergreen shrub	High-quality suitable habitat consisting of chaparral is located within the survey area. No CNDDB records of this species have been documented within five of the survey area. **Moderate Potential**
Piperia colemanii	Coleman's rein orchid	4.3	No	This species occurs within chaparral and lower montane coniferous forest habitats from 3,935 to 7,545 feet in elevation (CNPS 2025b).	June to August	Perennial herb	Although chaparral habitats are located within the survey area, the survey area is outside the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Piperia cooperi	Cooper's rein orchid	4.2	No	This species occurs within chaparral, cismontane woodland, and valley and foothill grassland habitats from 50 to 5,200 feet in elevation (CNPS 2025b).	March to June	Perennial herb	High-quality suitable habitat consisting of woodlands, non-native grassland, and chaparral is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. The nearest CNF ESRP record of this species was documented in an unknown year within the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. **High Potential**
Piperia leptopetala	Narrow-petaled rein orchid	4.3	No	This species occurs within cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest habitats from 1,245 to 7,300 feet in elevation (CNPS 2025b).	May to July	Perennial herb	Although oak woodlands are located within the survey area, the survey area is outside of the typical range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Pogogyne abramsii	San Diego mesa mint	1B.1, FE, SE	Yes	This species occurs within vernal pool habitat from 295 to 655 feet in elevation (CNPS 2025b).	March to July	Annual herb	No suitable habitat consisting of vernal pools is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Pseudognaphalium leucocephalum	White rabbit-tobacco	2B.2	No	This species occurs within chaparral, cismontane woodland, coastal sage scrub, and riparian woodland habitats from sea level to 6,890 feet in elevation (CNPS 2025b).	(July) August to November (December)	Perennial herb	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, coastal sage scrub, and woodlands is located within the survey area. One CNDDB record of this species was documented in 2006 within 4.3 miles of the survey area. **Moderate Potential**
Quercus cedrosensis	Cedros Island oak	2B.2	No	This species occurs within chaparral, closed-cone coniferous forest, and coastal sage scrub habitats from 835 to 3,150 feet in elevation (CNPS 2025b).	April to May	Perennial evergreen tree	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. One CNDDB record of this species was documented in 2013 within 4.4 miles of the survey area. **Moderate Potential**
Quercus dumosa	Nuttall's scrub oak	1B.1, USFSS	No	This species occurs within chaparral, closed-cone coniferous forest, and coastal sage scrub habitats from 50 to 1,310 feet in elevation (CNPS 2025b).	February to April (May to August)	Perennial evergreen shrub	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 1997 within 2.3 miles of the survey area. The nearest recent CNDDB record of this species was documented in 2005 within 3.8 miles of the survey area. **Moderate Potential**
Quercus engelmannii	Engelmann oak	4.2	No	This species occurs within chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland habitats from 165 to 4,265 feet in elevation (CNPS 2025b).	March to June	Perennial deciduous tree	High-quality suitable habitat consisting of non-native grassland, chaparral and woodlands is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. This species was observed during the 2025 field survey. **Present**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Rhinotropis cornuta var. *fishiae*	Fish's milkwort	4.3	No	This species occurs within chaparral, cismontane woodland, and riparian woodland habitats from 330 to 3,280 feet in elevation (CNPS 2025b).	May to August	Perennial deciduous shrub	High-quality suitable habitat consisting of chaparral and woodlands is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Ribes canthariforme	Moreno currant	1B.3, USFSS	No	This species occurs within chaparral and riparian scrub habitats from 1,115 to 3,935 feet in elevation (CNPS 2025b).	February to April	Perennial deciduous shrub	High-quality suitable habitat consisting of chaparral is located within the survey area. The nearest CNDDB record of this species was documented in an unknown year within 0.5 mile of the survey area. The nearest and most recent CNDDB record of this species was documented in 2015 within 2.2 miles of the survey area. One SanBIOS record of this species was documented in 2001 within 2.8 miles of the survey area. One Sunrise Powerlink Project record of this species was documented in 2010 within 1.1 miles of the survey area. **Moderate Potential**
Romneya coulteri	Coulter's matilija poppy	4.2	No	This species occurs within chaparral and coastal scrub habitats from 65 to 3,935 feet in elevation (CNPS 2025b).	March to July (August)	Perennial rhizomatous herb	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Salvia munzii	Munz's sage	2B.2	No	This species occurs within chaparral and coastal sage scrub habitats from 375 to 3,495 feet in elevation (CNPS 2025b).	February to April	Perennial evergreen shrub	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. One CNDDB record of this species was documented in 2006 within the survey area. This species was observed during the 2025 field survey. **Present**
Sanicula tracyi	Tracy's sanicle	4.2, USFSS	No	The species occurs within cismontane woodland, lower montane coniferous forest, and upper montane coniferous forest habitats from 330 to 5,200 feet in elevation (CNPS 2025b).	April to July	Perennial herb	Although oak woodlands are located within the survey area, the survey area is outside of the range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Scutellaria bolanderi ssp. *austromontana*	Southern mountains skullcap	1B.2, USFSS	No	This species occurs within mesic areas within chaparral, cismontane woodland, and lower montane coniferous forest habitats from 1,395 to 6,560 feet in elevation (CNPS 2025b).	June to August	Perennial rhizomatous herb	Moderate-quality suitable habitat consisting of woodlands and chaparral is located within the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. The nearest historic CNDDB record of this species was documented in 1937 within 0.3 mile of the survey area. **Moderate Potential**
Selaginella cinerascens	Ashy spike-moss	4.1	No	This species occurs within chaparral and coastal scrub habitats from 65 to 2,100 feet in elevation (CNPS 2025b).	Not applicable	Perennial rhizomatous herb	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Senna covesii	Cove's cassia	2B.2	No	This species occurs within Sonoran desert scrub habitat from 740 to 4,250 feet in elevation (CNPS 2025b).	March to June (August)	Perennial herb	No suitable habitat is located within the survey area. One CNDDB record of this species was documented in 2007 within 2.4 miles of the survey area. **Absent**
Sibaropsis hammittii	Hammitt's clay-cress	1B.2, USFSS	No	This species occurs within chaparral and valley and foothill grassland habitats from 2,360 to 3,495 feet in elevation (CNPS 2025b).	March to April	Annual herb	Moderate-quality suitable habitat consisting of non-native grassland and chaparral is located within the survey area. The nearest and most recent CNDDB record of this species was documented in 2003 within 3.3 miles of the survey area. The nearest and most recent SanBIOS record of this species was documented in 1994 within 2.7 miles of the survey area. **Moderate Potential**
Sphaerocarpos drewiae	Bottle liverwort	1B.1	No	This species occurs within chaparral and coastal sage scrub habitats from 295 to 1,970 feet in elevation (CNPS 2025b).	Not applicable	Ephemeral liverwort	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. One CNDDB record of this species was documented in 1994 within 4.8 miles of the survey area. **Moderate Potential**
Stipa diegoensis	San Diego County needle grass	4.2	No	This species occurs within chaparral and coastal scrub habitats from 35 to 2,625 feet in elevation (CNPS 2025b).	February to June	Perennial herb	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Streptanthus campestris	Southern jewel-flower	1B.3, USFSS	No	This species occurs within chaparral, lower montane coniferous forest, and pinyon and juniper woodland habitats from 2,955 to 7,545 feet in elevation (CNPS 2025b).	(April) May to July	Perennial herb	Moderate-quality suitable habitat consisting of chaparral is located within the survey area. The elevation of the survey area is located just within the typical elevation range for this species. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Symphyotrichum defoliatum	San Bernardino aster	1B.2, USFSS	No	This species occurs within cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic) habitats from five to 6,695 feet in elevation (CNPS 2025b).	July to November	Perennial rhizomatous herb	Moderate-quality suitable habitat consisting of woodlands, non-native grassland, and coastal scrub is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Tetracoccus dioicus	Parry's tetracoccus	1B.2, USFSS	No	This species occurs within chaparral and coastal sage scrub habitats from 540 to 3,280 feet in elevation (CNPS 2025b).	April to May	Perennial deciduous shrub	Moderate-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 2011 within 1.5 miles of the survey area. The most recent CNDDB record of this species was documented in 2015 within 1.5 miles of the survey area. **Moderate Potential**

Scientific Name	Common Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Habitat Requirements	Blooming Period[2]	Life Form	Potential to Occur in the Survey Area
Thermopsis californica var. *semota*	Velvety false lupine	1B.2, USFSS	No	This species occurs within cismontane woodland, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland habitats from 3,280 to 6,135 feet in elevation (CNPS 2025b).	March to June	Perennial rhizomatous herb	Although high-quality suitable woodland and non-native grassland habitats are located within the survey area, the survey area is outside the elevation range of this species. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Thysanocarpus rigidus	Rigid fringepod	1B.2, USFSS	No	This species occurs within pinyon and juniper woodland habitats from 1,970 to 7,220 feet in elevation (CNPS 2025b).	February to May	Annual herb	No suitable habitat is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Xanthisma junceum	Rush like bristleweed	4.3	No	This species occurs within chaparral and coastal sage scrub habitats from 785 to 3,280 feet in elevation (CNPS 2025b).	January to October	Perennial herb	High-quality suitable habitat consisting of chaparral, coastal sage/chaparral mix, and coastal sage is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. The nearest and most recent SanBIOS record of this species was documented in 2012 within 0.7 mile of the survey area. The nearest CNF ESRP record of this species was documented in an unknown year within 0.1 mile of the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2009 within the survey area. This species was observed during the 2025 field survey. **Present**

Sources: California Native Plant Society (CNPS) 2025b, CDFW 2025d, SanGIS 2025, U.S. Fish and Wildlife Service (USFWS) 2011, USFWS 2025b, and USFWS 2025c.

ATTACHMENT 3.5-D: SPECIAL-STATUS PLANT SPECIES OCCURRENCES IN THE VICINITY OF THE PROPOSED PROJECT AREA

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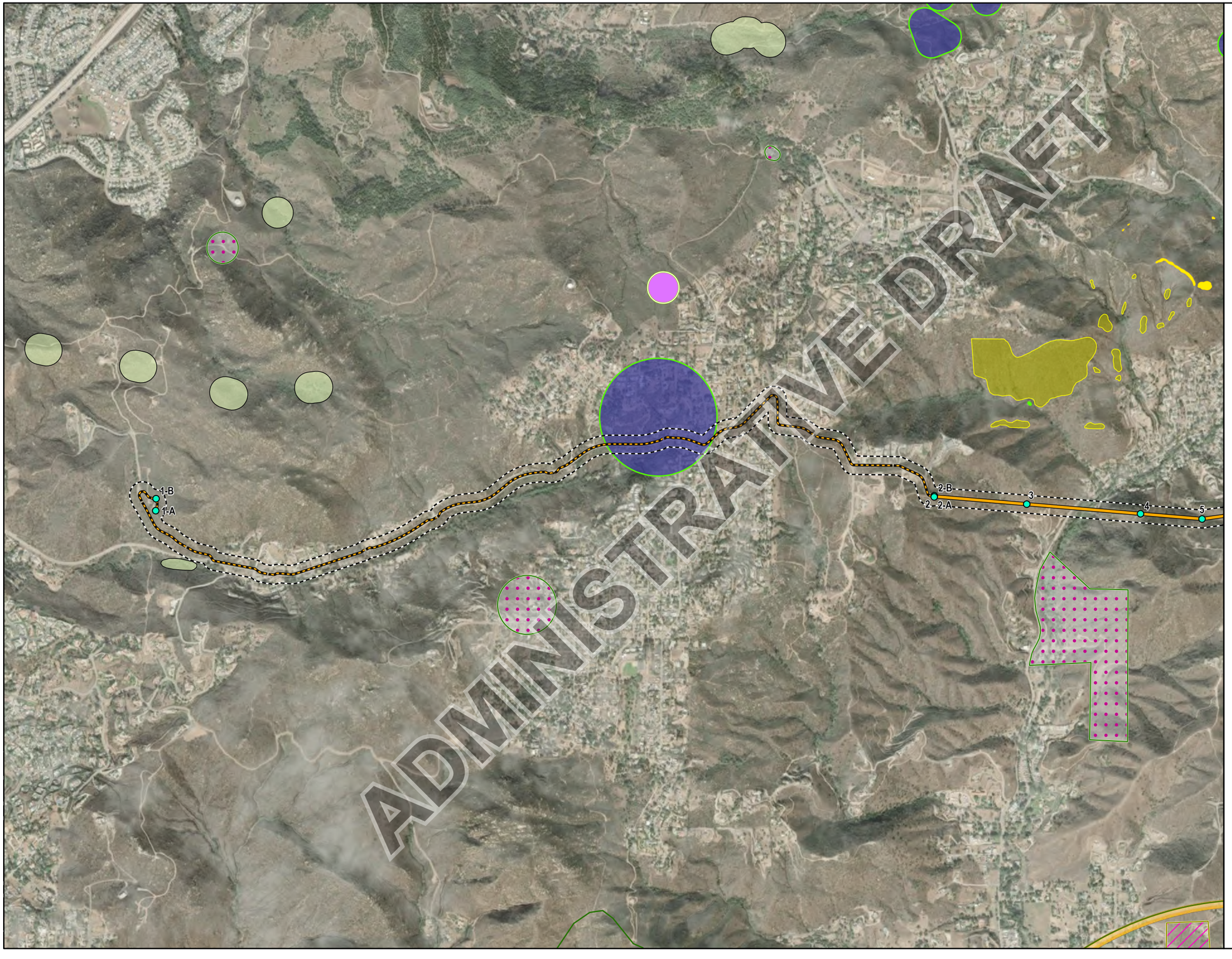


Attachment 3.5-D:
Special-Status Plant Species Occurrences within the Vicinity of the Proposed Project Area
Map 1 of 4

Suncrest
230 Kilovolt Loop-In Project

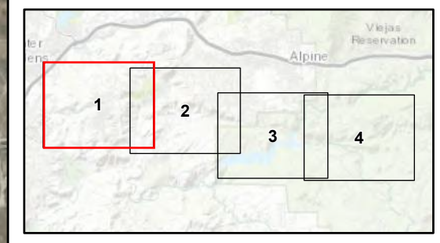
- Survey Area
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment

SanBios Plant Data

- Rush-like Bristleweed (*Xanthisma junceum*)
- San Diego County Viguiera (*Bahiopsis lacinata*)
- San Diego Sagewort (*Artemisia palmeri*)

California Natural Diversity Database

- Dehesa Nolina (*Nolina interrata*)
- Delicate Clarkia (*Clarkia delicata*)
- Lakeside Ceanothus (*Ceanothus cyaneus*)
- Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*)
- Robinson's Pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- San Diego Sagewort (*Artemisia palmeri*)
- Small-headed Monardella (*Monardella breweri* ssp. *microcephala*)



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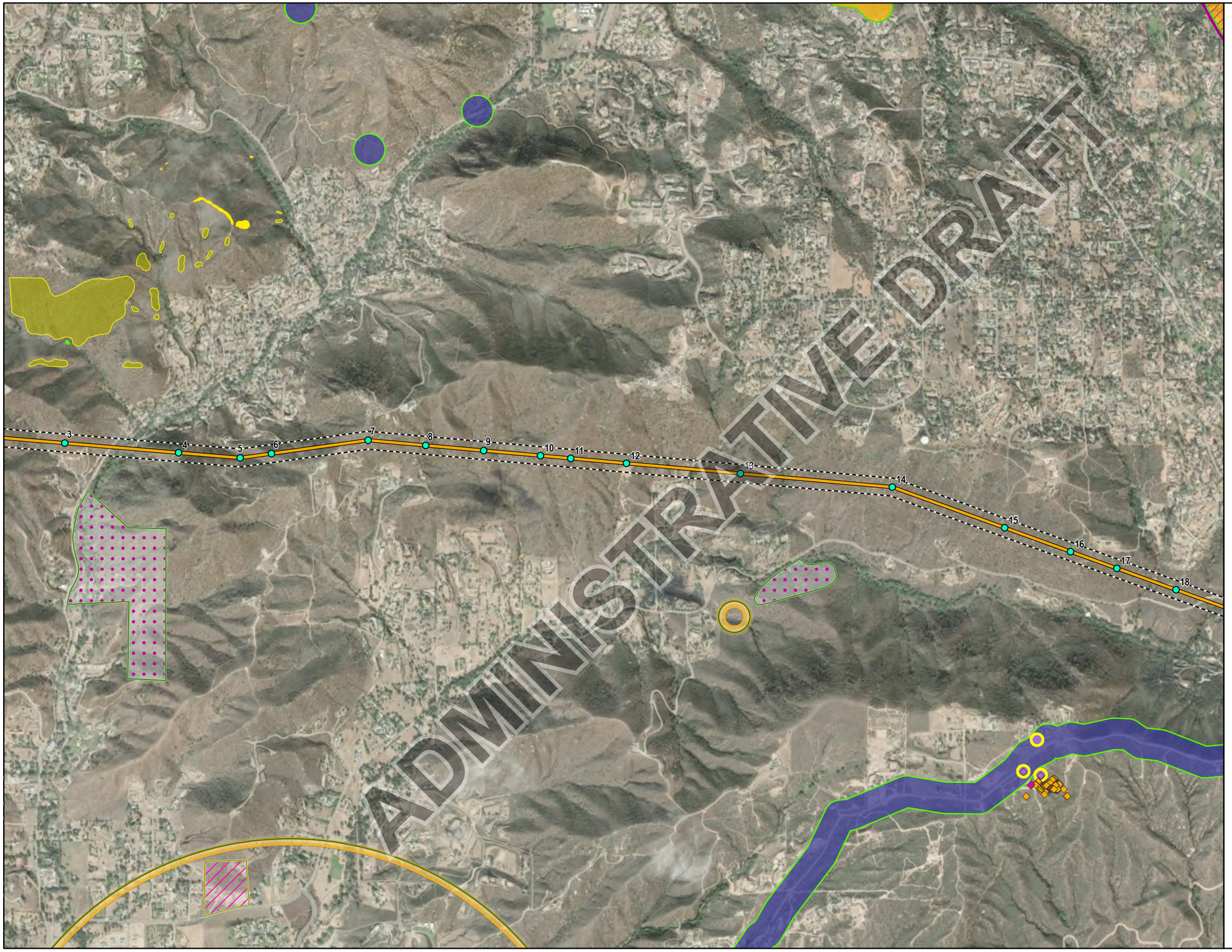


Attachment 3.5-D:
Special-Status Plant Species Occurrences within the Vicinity of the Proposed Project Area
Map 2 of 4

Suncrest
230 Kilovolt Loop-In Project

- Survey Area
- Proposed Pole Location
- Proposed 230 kV OH Segment

San Diego Gas & Electric Company Cleveland National Forest Electric Safety and Reliability Project Data

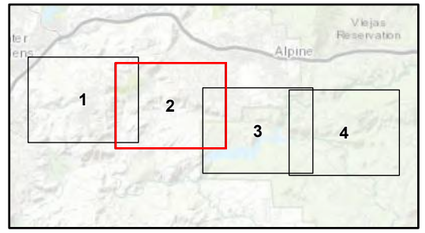
- San Diego County Viguiera (*Bahiopsis laciniata*)
- Orcutt's Brodiaea (*Brodiaea orcuttii*)
- Brewer's Calandrinia (*Calandrinia breweri*)
- Cooper's Rein Orchid (*Piperia cooperi*)

SanBios Plant Data

- Rush-like Bristleweed (*Xanthisma junceum*)
- San Diego County Viguiera (*Bahiopsis lacinata*)
- San Diego Sagewort (*Artemisia palmeri*)

California Natural Diversity Database

- Delicate Clarkia (*Clarkia delicata*)
- Lakeside Ceanothus (*Ceanothus cyaneus*)
- Vanishing Wild Buckwheat (*Eriogonum evanidum*)
- Orcutt's Brodiaea (*Brodiaea orcuttii*)
- Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*)
- Robinson's Pepper-grass (*Lepidium virginicum* var. *robinsonii*)
- San Diego Goldenstar (*Bloomeria clevelandii*)



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Attachment 3.5-D:
Special-Status Plant Species Occurrences within the Vicinity of the Proposed Project Area
Map 3 of 4

Suncrest
230 Kilovolt Loop-In Project

Survey Area
Proposed Pole Location
Proposed 230 kV OH Segment

San Diego Gas & Electric Company Cleveland National Forest Electric Safety and Reliability Project Data

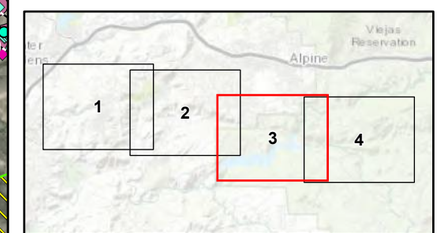
San Diego County Viguiera (*Bahiopsis laciniata*)
Orcutt's Brodiaea (*Brodiaea orcuttii*)
Brewer's Calandrinia (*Calandrinia breweri*)
Dunn's Mariposa Lily (*Calochortus dunnii*)
Delicate Clarkia (*Clarkia delicata*)
San Diego Sunflower (*Hulsea californica*)
Rush-like Bristleweed (*Xanthisma junceum*)
Cooper's Rein Orchid (*Piperia cooperi*)

Sweetwater Authority Data

San Diego Sagewort (*Artemisia palmeri*)
Southwestern Spiny Rush (*Juncus acutus* ssp. *leopoldii*)

California Natural Diversity Database

Delicate Clarkia (*Clarkia delicata*)
Dunn's Mariposa Lily (*Calochortus dunnii*)
Lakeside Ceanothus (*Ceanothus cyaneus*)
Munz's Sage (*Salvia munzii*)
Orcutt's Brodiaea (*Brodiaea orcuttii*)
Ramona Horkelia (*Horkelia truncata*)
Robinson's Pepper-grass (*Lepidium virginicum* var. *robinsonii*)
San Diego Milk-vetch (*Astragalus oocarpus*)



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Attachment 3.5-D:
Special-Status Plant Species Occurrences within the Vicinity of the Proposed Project Area
Map 4 of 4

Suncrest
230 Kilovolt Loop-In Project

ADMINISTRATIVE DRAFT

Felt-leaved Monardella

57-A
57-B
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43.1
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41.1
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39.1
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35.1
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Survey Area
Existing Suncrest Substation
Proposed Pole Location
Proposed 230 kV Eastern UG Segment
Proposed 230 kV OH Segment

San Diego Gas & Electric Company Cleveland National Forest Electric Safety and Reliability Project Data

- San Diego County Viguiera (*Bahiopsis laciniata*)
- Dunn's Mariposa Lily (*Calochortus dunnii*)
- Delicate Clarkia (*Clarkia delicata*)
- San Diego Sunflower (*Hulsea californica*)
- Cooper's Rein Orchid (*Piperia cooperi*)

Sunrise Powerlink Project Data

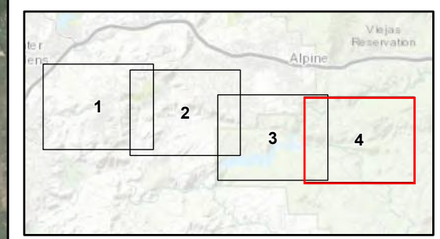
- Cooper's Piperia (*Piperia cooperi*)
- San Diego Milk-vetch (*Astragalus oocarpus*)
- Engelmann Oak (*Quercus engelmannii*)
- Felt-leaved Monardella (*Monardella hypoleuca* ssp. *lanata*)
- Palmer's Goldenbush (*Ericameria palmeri* var. *palmeri*)
- Peninsular Spineflower (*Chorizanthe leptotheca*)
- Rush-like Bristleweed (*Xanthisma junceum*)

SanBios Plant Data

- Felt-leaved Monardella (*Monardella hypoleuca* ssp. *lanata*)

California Natural Diversity Database

- Delicate Clarkia (*Clarkia delicata*)
- Dunn's Mariposa Lily (*Calochortus dunnii*)
- Felt-leaved Monardella (*Monardella hypoleuca* ssp. *lanata*)
- Moreno Currant (*Ribes canthariforme*)
- Orcutt's Brodiaea (*Brodiaea orcuttii*)
- Ramona Horkelia (*Horkelia truncata*)
- Southern Mountains Skullcap (*Scutellaria bolanderi* ssp. *austromontana*)



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ATTACHMENT 3.5-E: SPECIAL-STATUS PLANT SPECIES OBSERVED WITHIN THE SURVEY AREA

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Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 1 of 14

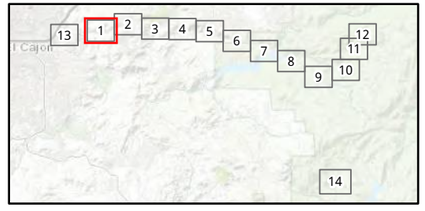
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV Western UG Segment

Special-Status Plant Observations
- Delicate Clarkia (Clarkia delicata)
- San Diego County Viguiera (Bahiopsis laciniata)
- San Diego Sagewort (Artemisia palmeri)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Agricultural
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental



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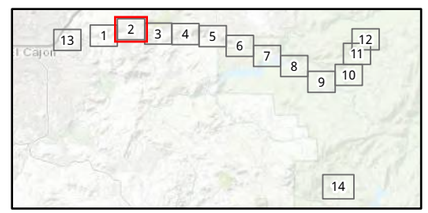
Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 2 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Proposed 230 kV Western UG Segment
Special-Status Plant Observations
San Diego County Viguiera (Bahiopsis laciniata)
San Diego Sagewort (Artemisia palmeri)
Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
San Diego County Viguiera (Bahiopsis laciniata)
Vegetation Communities and Land Covers
Bare Ground
Chaparral
Coast Live Oak Riparian Forest
Coastal Sage Scrub
Coastal Sage/Chaparral Mix
Developed
Disturbed
Landscaped/Ornamental
Open Oak Woodland



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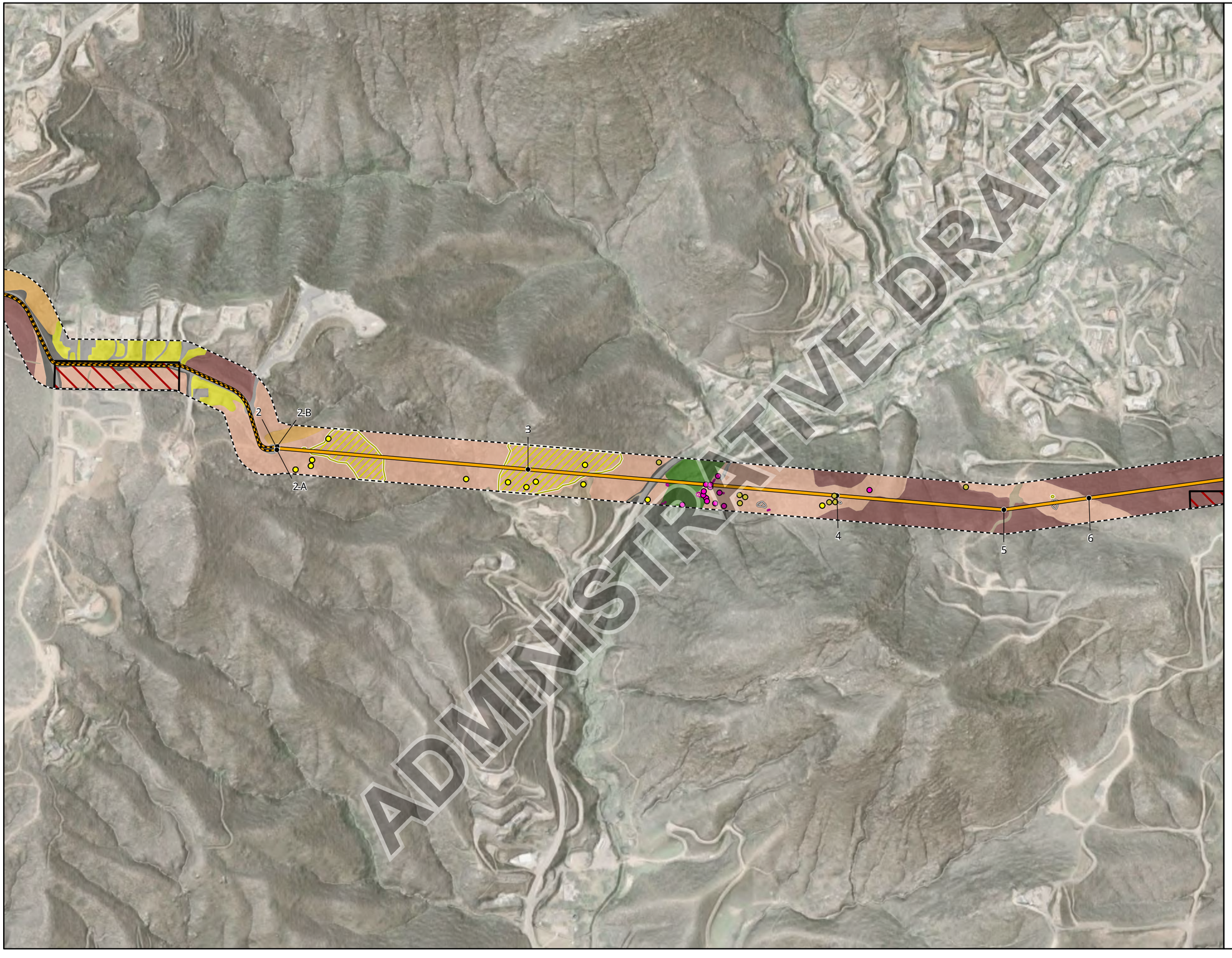


Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 3 of 14

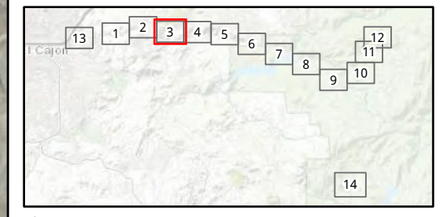
Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment

Special-Status Plant Observations
- Delicate Clarkia (Clarkia delicata)
- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- San Diego County Viguiera (Bahiopsis laciniata)
- Delicate Clarkia (Clarkia delicata)
- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Concrete Lined Channel
- Developed
- Disturbed
- Landscaped/Ornamental



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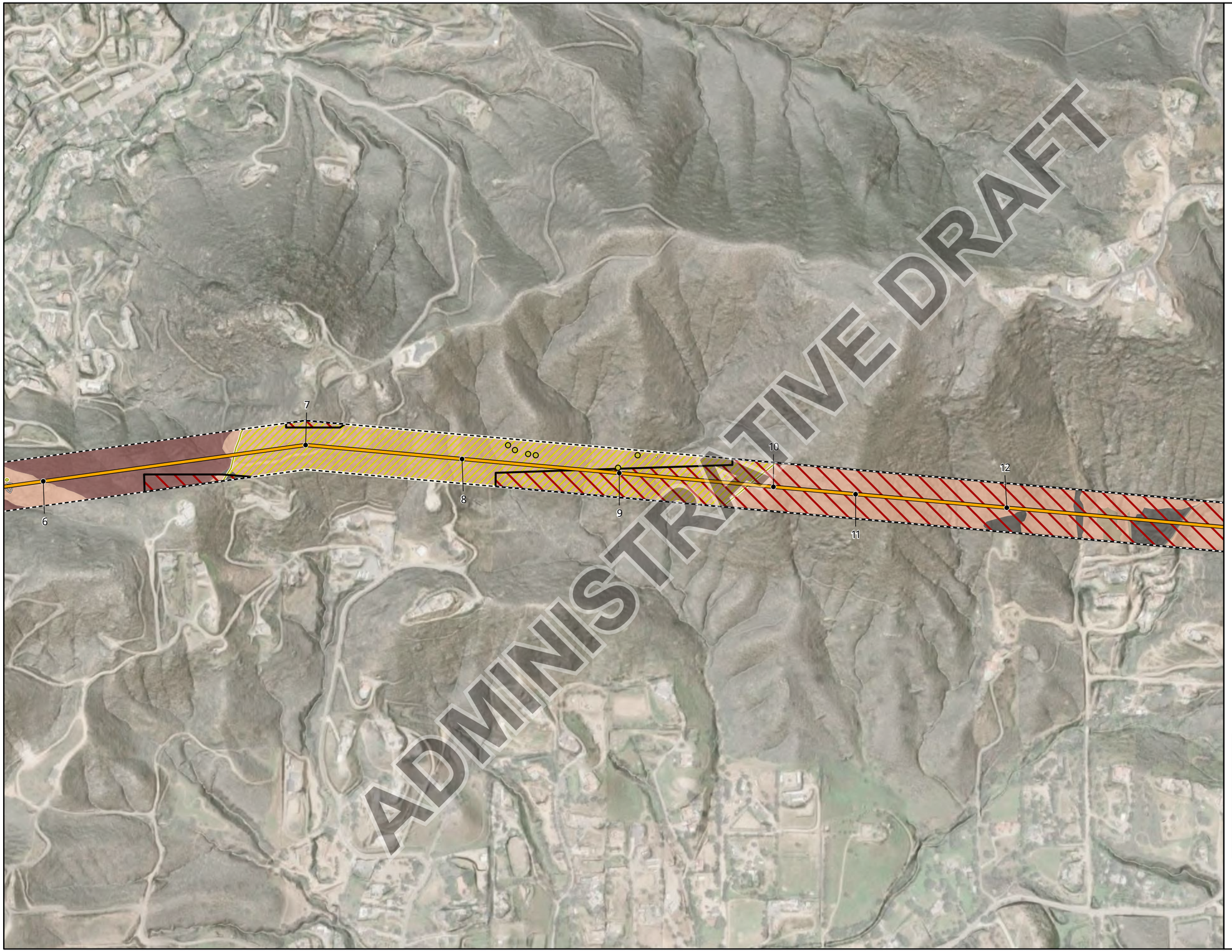


Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 4 of 14

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components

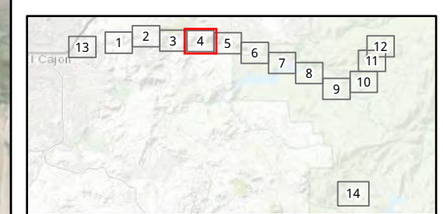
- Proposed Pole Location
- Proposed 230 kV OH Segment

Special-Status Plant Observations

- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Disturbed



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ADMINISTRATIVE DRAFT

Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 5 of 14

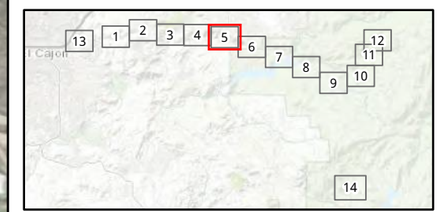
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Special-Status Plant Observations
- San Diego County Viguiera (Bahiopsis laciniata)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Disturbed
- Riparian Woodland



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Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 6 of 14

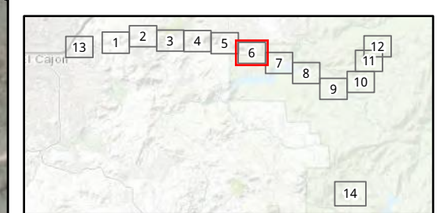
Suncrest 230 Kilovolt Loop-In Project

Survey Area

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Special-Status Plant Observations
- Engelmann Oak (Quercus engelmannii)
- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- San Diego County Viguiera (Bahiopsis laciniata)
- Munz's Sage (Salvia munzii)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Riparian Woodland



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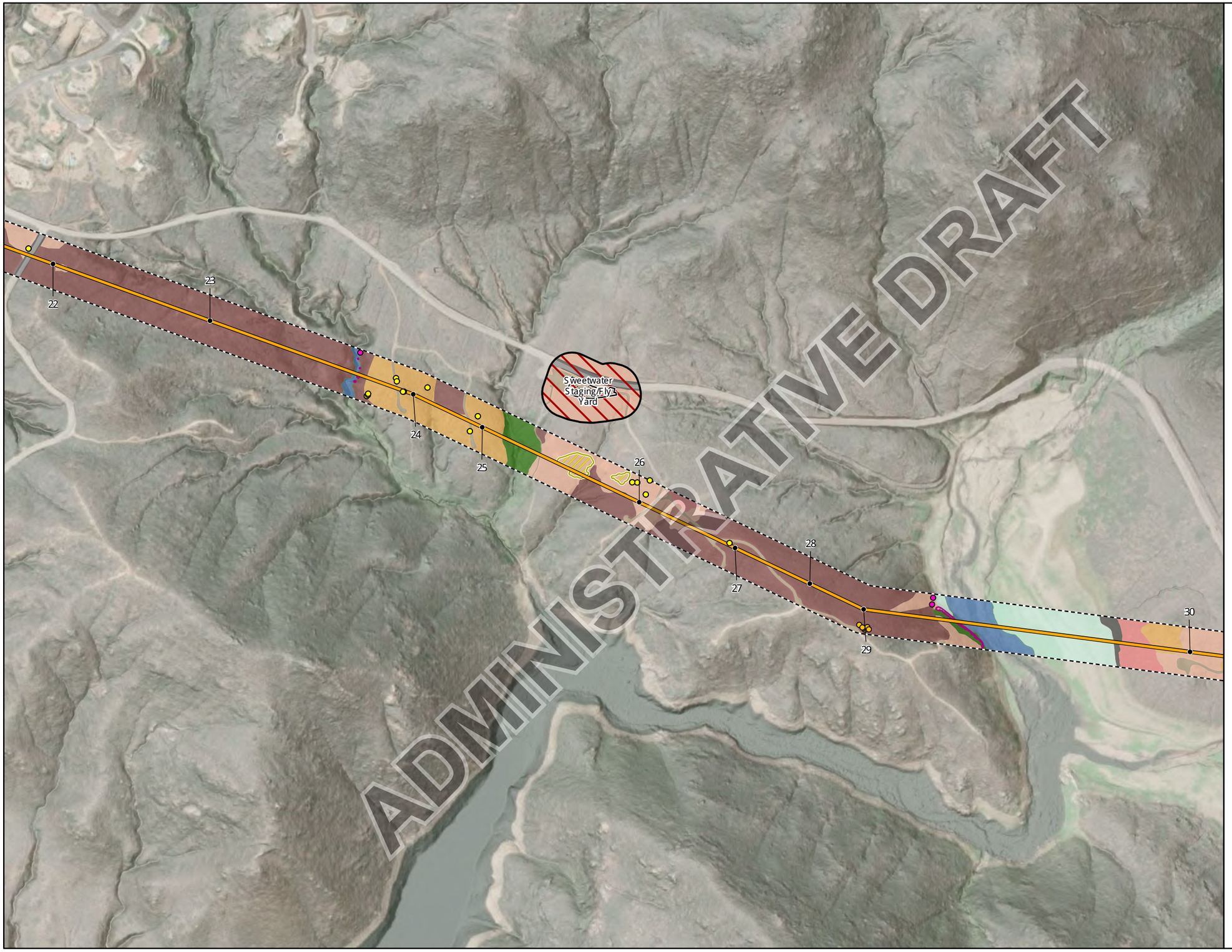


ADMINISTRATIVE DRAFT

Attachment 3.5-E:
Special-Status Plant Species Observed within the Survey Area
Map 7 of 14

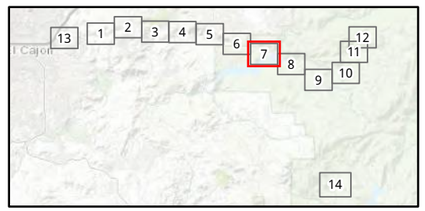
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Staging Yard/Fly Yard

Special-Status Plant Observations
- Delicate Clarkia (Clarkia delicata)
- Rush Like Bristleweed (Xanthisma junceum)
- San Diego County Viguiera (Bahiopsis laciniata)
- Delicate Clarkia (Clarkia delicata)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Buckwheat Scrub
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Non-Vegetated
- Riparian Woodland



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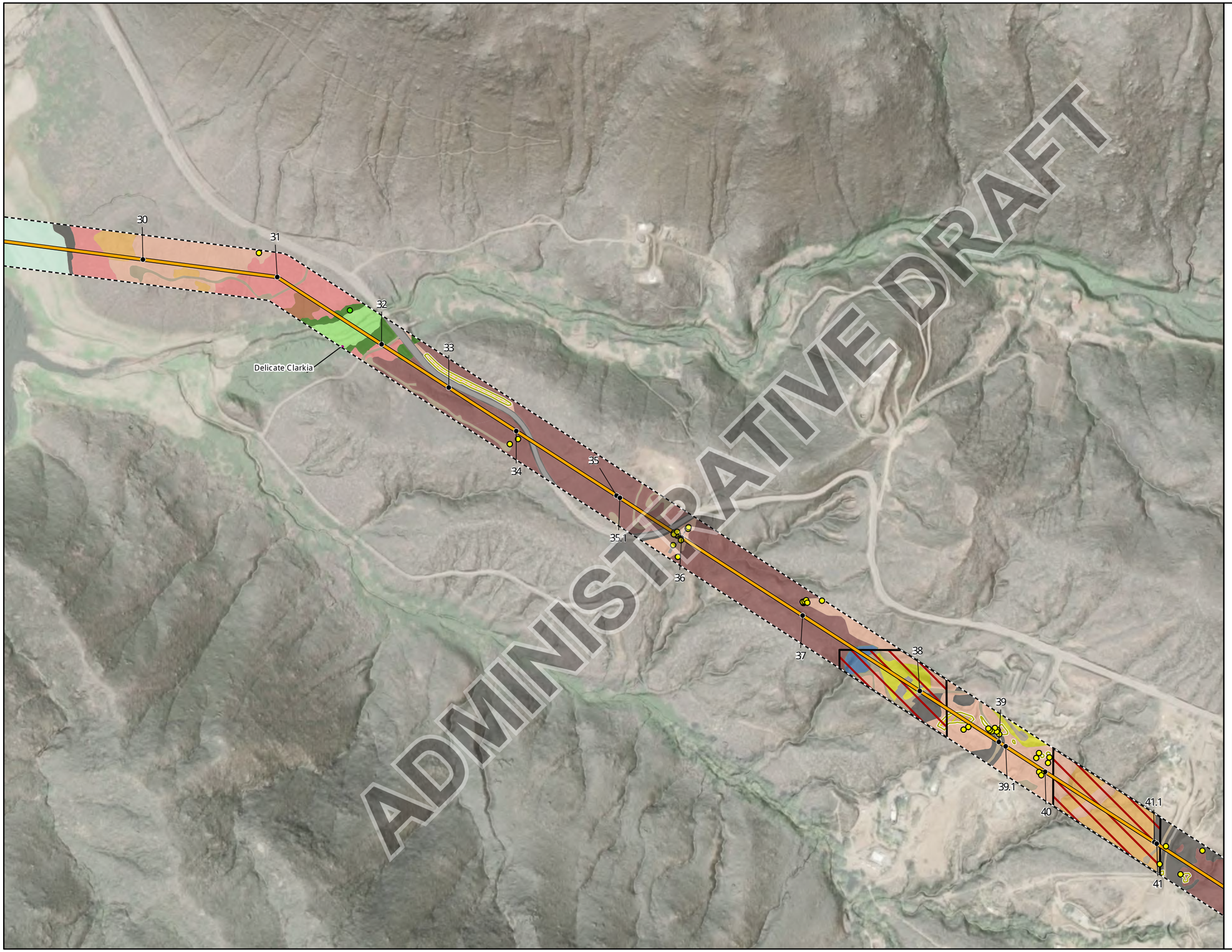


Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 8 of 14

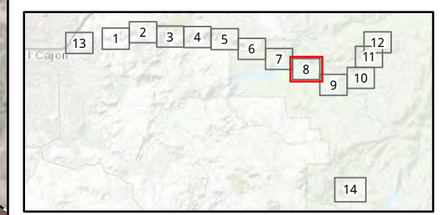
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Special-Status Plant Observations
- Engelmann Oak (Quercus engelmannii)
- San Diego County Viguiera (Bahiopsis laciniata)
- Delicate Clarkia (Clarkia delicata)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Buckwheat Scrub
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental
- Non-Native Grassland
- Non-Vegetated
- Riparian Forest
- Riparian Woodland



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Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 9 of 14

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components

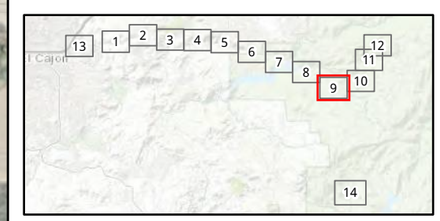
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard

Special-Status Plant Observations

- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- San Diego County Viguiera (Bahiopsis laciniata)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental
- Riparian Forest



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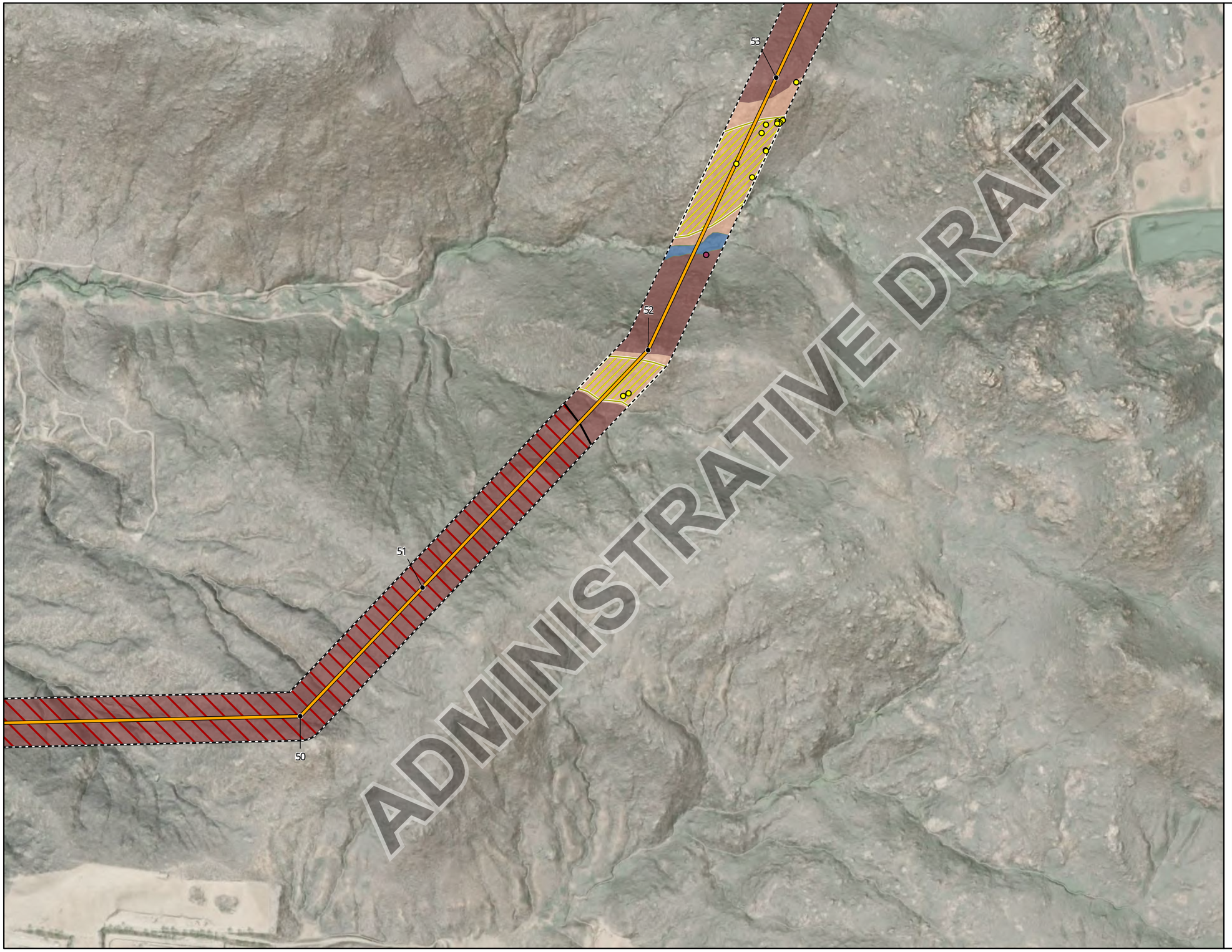
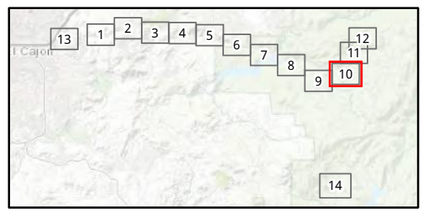


Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 10 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Proposed Pole Location
Proposed 230 kV OH Segment
Special-Status Plant Observations
Palmer's Goldenbush (Ericameria palmeri var. palmeri)
San Diego County Viguiera (Bahiopsis laciniata)
San Diego County Viguiera (Bahiopsis laciniata)
Vegetation Communities and Land Covers
Chaparral
Coastal Sage Scrub
Riparian Woodland



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ADMINISTRATIVE DRAFT

Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 11 of 14

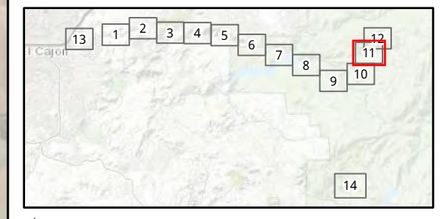
Suncrest 230 Kilovolt Loop-In Project

- Survey Area

Project Components
- Proposed Pole Location
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV OH Segment
- Existing Suncrest Substation

Special-Status Plant Observations
- Engelmann Oak (Quercus engelmannii)
- Palmer's Goldenbush (Ericameria palmeri var. palmeri)
- Robinson's Pepper-grass (Lepidium virginicum var. robinsonii)
- Rush Like Bristleweed (Xanthisma junceum)
- San Diego County Viguiera (Bahiopsis laciniata)
- Engelmann Oak (Quercus engelmannii)
- Rush Like bristleweed (Xanthisma junceum)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Open Engelmann Oak Woodland
- Riparian Woodland



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Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 12 of 14

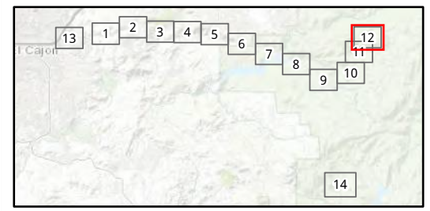
Suncrest 230 Kilovolt Loop-In Project

Survey Area

Project Components
- Proposed Pole Location
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV OH Segment
- Existing Suncrest Substation

Special-Status Plant Observations
- Engelmann Oak (Quercus engelmannii)
- Rush Like Bristleweed (Xanthisma junceum)
- San Diego County Viguiera (Bahiopsis laciniata)
- Engelmann Oak (Quercus engelmannii)
- San Diego County Viguiera (Bahiopsis laciniata)

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Open Engelmann Oak Woodland
- Open Oak Woodland



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ADMINISTRATIVE DRAFT

Hospital Staging Yard

Greenfield Staging Yard

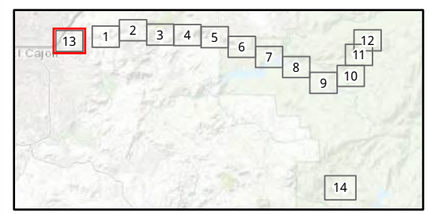
Attachment 3.5-E:
Special-Status Plant Species Observed within the Survey Area
Map 13 of 14

Suncrest 230 Kilovolt Loop-In Project

Area Not Accessed

Project Components
- Staging Yard

Vegetation Communities and Land Covers
- Bare Ground
- Developed
- Disturbed
- Landscaped/Ornamental



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ADMINISTRATIVE DRAFT

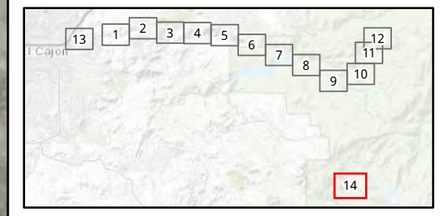
Attachment 3.5-E:
Special-Status Plant Species Observed
within the Survey Area
Map 14 of 14

Suncrest 230 Kilovolt Loop-In Project

Area Not Accessed

Project Components
- Staging Yard
- Staging Yard/Fly Yard

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coastal Sage/Chaparral Mix
- Disturbed
- Non-Native Grassland



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ATTACHMENT 3.5-F: SPECIAL-STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE SURVEY AREA

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ATTACHMENT 3.5-F: SPECIAL-STATUS WILDLIFE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN THE SURVEY AREA

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Amphibians					
Arroyo toad	*Anaxyrus californicus*	FE, SSC	Yes	This species primarily occupies rivers and streams with shallow, gravelly pools adjacent to sandy terraces. Breeding habitat consists of pools less than six inches deep, areas of flowing water with current velocities of less than 1.3 feet per second, and surface water that lasts for a minimum of two months during the breeding season (i.e., March 15 to August 15). A natural flooding regime (or one sufficiently corresponding to a natural flooding regime) is important in maintaining the physical and biological features of the breeding habitat. Additionally, stream channels and adjacent upland habitats are important for movement to and from breeding pools, foraging areas, overwintering sites, upstream and downstream dispersal, and connectivity to areas that contain suitable habitat (SDG&E 2023).	High-quality suitable aquatic breeding habitat is located within the survey area within Loveland Reservoir, Sweetwater River, and Taylor Creek. High-quality suitable upland habitat consisting of non-native grassland, buckwheat scrub, riparian forest, coast live oak forest, and chaparral habitat is located within the survey area adjacent to the suitable aquatic habitat. Additionally, the survey area is located within USFWS-designated critical habitat for this species. The nearest recent CNDDB record of this species was documented in 2005 within 1.6 miles of the survey area. The nearest historic CNDDB record of this species was documented in 1999 within the survey area. Additionally, the nearest and most recent Sweetwater Authority record of this species was documented in 2017 within the survey area. **Aquatic/Breeding: High Potential** **Upland: High Potential**
Large-blotched salamander	*Ensatina eschscholtzii klauberi*	WL, USFSS	No	This species is found under rocks, logs, and other debris within moist shaded evergreen and deciduous forests and oak woodlands. Reproduction is terrestrial and eggs are typically laid in April or May at the end of the rainy season. Young develop completely within the egg and typically emerge after the first major rain event in the fall. This subspecies occurs at the farthest eastern extent of the species' range within the Peninsular Ranges of San Diego County and likely hybridizes with the Monterey ensatina (*Ensatina eschscholtzii eschscholtzii*) (California Herps 2025a).	High-quality suitable habitat consisting of woodlands, riparian forest, coast live oak riparian forest, and coast live oak forest is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Western spadefoot	*Spea hammondii*	FPT, SSC	Yes	This species occurs from sea level to 4,460 feet in elevation. Breeding habitat consists of both natural and altered permanent and temporary wetlands that maintain water for at least 30 days including vernal pools, ephemeral streams, artificial ponds, livestock ponds, sedimentation and flood control ponds, irrigation and roadside ditches, roadside puddles, tire ruts, and borrow pits. Additionally, habitat for this species consists of adjacent uplands up to 1,500 feet from breeding habitat that allow for movement to breeding habitat, foraging areas, and overwintering sites. In San Diego County, western spadefoot distribution generally parallels the distribution of vernal pool habitat along the coast and foothills (SDG&E 2023).	High-quality suitable aquatic breeding habitat is located within the survey area within Loveland Reservoir, Sweetwater River, and Taylor Creek, as well as their tributaries. High-quality suitable upland habitat consisting of non-native grassland, coastal sage scrub, buckwheat scrub, riparian forest, woodlands, coast live oak forest, and chaparral habitat is located within the survey area adjacent to suitable aquatic habitat. The nearest CNDDB record of this species was documented in 2012 within the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2012 within the survey area. **Aquatic/Breeding: High Potential** **Upland: High Potential**

[1] Explanation of federal and state listing codes:

Federal listing codes:

-FE: Federally listed as endangered
-FT: Federally listed as threatened
-FPT: Federally proposed for listing as threatened
-BGEPA: BGEPA protected
-USFSS: USFS Sensitive

State listing codes:

-SSC: SSC
-WL: Watch list species
-SE: State-listed as endangered
-ST: State-listed as threatened
-SCE: State candidate for listing
-FP: Fully protected species

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Birds					
Bald eagle	*Haliaeetus leucocephalus*	SE, FP, USFSS, BGEPA	Yes	This species is a winter resident that occupies grasslands, woodlands, and forest habitats adjacent to large bodies of water or rivers. Large trees are used for nests, which are typically 50 to 200 feet above the ground surface. Breeding occurs from February through July. This species is known to nest in San Diego County in low numbers (CDFW 2025e).	Moderate-quality suitable foraging habitat consisting of riparian woodland is located within the survey area. Open water within the nearby Loveland Reservoir is also located within 0.3 mile of the survey area. Non-vegetated portions of the survey area within Loveland Reservoir may become open water in some years; however, water levels are subject to seasonal variation. Low-quality suitable nesting habitat is located within scattered black willows along Sweetwater River within the survey area. No CNDDB records of this species have been documented within five miles of the survey area, but the species has been recorded on eBird in the vicinity of Loveland Reservoir and Taylor Creek (eBird 2025). The nearest known active bald eagle nest is located adjacent to El Capitan Reservoir approximately 4.7 miles north of the survey area. This species was observed during the 2025 field survey as a fly-over. **Foraging: Present** **Nesting: Low Potential**
Bell's sparrow	*Amphispiza belli belli*	WL	No	This species is a year-round resident that occupies low, dense stands of vegetation in chaparral and desert scrub habitats during the breeding season, and less dense, arid shrub habitats in the winter. Breeding occurs from late March to mid-August. This species forages from the ground below and between shrubs. It feeds on insects, spiders, and seeds during the breeding season and primarily feeds on seeds in the winter (CDFW 2025e).	Moderate-quality suitable nesting and foraging habitat consisting of coastal sage/chaparral mix, chaparral, and coastal sage scrub is located within the survey area. The most recent SanBIOS record of this species was documented in 1998 within 0.2 mile of the survey area. **Foraging: Moderate Potential** **Nesting: Moderate Potential**
Brown pelican	*Pelicanus occidentalis*	USFSS	No	This species occupies estuarine, marine subtidal, and marine pelagic waters along the California coast (CDFW 2025e).	No suitable habitat for this species is located within the survey area, and the survey area is not within the elevation range of the species. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Absent** **Nesting: Absent**
California spotted owl	*Strix occidentalis occidentalis*	SSC, USFSS	No	This species is a non-migratory resident that primarily nests within mature, multi-storied forests with complex structure, larger trees, multi-layered high canopy cover, and large amounts of coarse woody debris, while areas with higher heterogeneity of forest types and the edges between the forests are important as foraging habitat (USFWS 2022).	No suitable habitat for this species is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Absent** **Nesting: Absent**
Coastal cactus wren	*Campylorhynchus brunneicapillus sandiegensis*	SSC, USFSS	Yes	This species is a non-migratory songbird that occupies coastal sage scrub and chaparral habitats extending from extreme northwestern Baja California through the coastal lowlands of San Diego County and into southern Orange County. A key habitat component is tall thickets of chollas (*Cylindropuntia* spp.) or prickly pear cacti (*Opuntia* spp.) to support nesting (CDFW 2025e).	Low-quality suitable nesting and foraging habitat consisting of coastal sage/chaparral mix, chaparral, and coastal sage scrub is located within the survey area. Dense stands of chollas or cacti are not present within the survey area. No recent CNDDB records have been documented within five miles of the survey area. The nearest historic CNDDB record was documented in 2003 within 2.5 miles of the survey area. **Foraging: Low Potential** **Nesting: Low Potential**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Coastal California gnatcatcher	*Polioptila californica californica*	FT, SSC	Yes	This species is a non-migratory songbird that primarily occupies coastal sage scrub habitat dominated by California sagebrush and California buckwheat. This species is more numerous near the sage scrub-grassland interface than the sage scrub-chaparral interface; and the species generally prefers densely vegetated coastal sage scrub below 1,000 feet in elevation over more open and sparsely vegetated sites (SDG&E 2023).	High-quality suitable nesting and foraging habitat consisting of coastal sage/chaparral mix, chaparral, and coastal sage scrub is located within the survey area. The nearest recent CNDDB record of this species was documented in 2017 within 2.4 miles of the survey area, and the nearest CNDDB record of this species was documented in 1997 within the survey area. One SanBIOS record of this species was documented in 2008 within 2.3 miles of the survey area. **Foraging: Moderate Potential** **Nesting: Moderate Potential**
Cooper's hawk	*Asturr cooperii*	WL	No	This species is a year-round resident that occupies wooded areas, favoring dense oak and riparian habitats near water. The species primarily hunts small birds and mammals, and relies on dense cover for hunting. This species nests in deciduous trees or conifers (CDFW 2025e).	High-quality suitable nesting and foraging habitat consisting of woodlands, riparian forest, coast live oak forest, and coast live oak riparian forest is located within the survey area. The nearest CNDDB record of this species was documented in 1996 within the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. This species was observed during the 2025 field survey as a fly-over. **Foraging: Present** **Nesting: Moderate Potential**
Golden eagle	*Aquila chrysaetos*	FP, WL, BGEPA	Yes	This species forages within a variety of habitats and terrain, including grasslands, chaparral, coastal sage scrub, oak woodlands, and forests. This species nests in rugged, mountainous terrain, generally well away from human disturbance, primarily on cliff-walled canyons and occasionally in large trees in open areas (CDFW 2025e).	High-quality suitable foraging habitat consisting of non-native grassland, chaparral, coastal sage scrub, coastal sage/chaparral mix, and woodlands and forests is located within the survey area. Moderate-quality nesting habitat is located within one mile of the survey area on cliffs in the vicinity of Bell Bluff and on tall, isolated trees in the vicinity of Loveland Reservoir. Nesting activity at Bell Bluff territory has not been documented since 2000. Nesting activity at the Loveland Reservoir territory has not been documented since 2003 (SDG&E 2024). No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Moderate Potential** **Nesting: Low Potential**
Grasshopper sparrow	*Ammodramus savannarum*	SSC	No	This species is a migratory songbird and summer visitor that occupies dense grasslands consisting of taller forbs, scattered shrubs, and diverse grasses. This species occupies hillsides and mesas primarily in coastal southern California and forages on the ground and within low foliage in dense grasslands, primarily feeding on insects. This species typically arrives in southern California from March to May and departs in August or September (CDFW 2025e).	Low-quality suitable foraging and nesting habitat consisting of non-native grassland is located within the survey area. The most recent SanBIOS record of this species was documented in 2001 within 1.4 miles of the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Low potential** **Nesting: Low potential**
Gray vireo	*Vireo vicinior*	SSC, USFSS	No	This species is a migratory songbird that typically occupies chaparral habitat in the Peninsular Ranges of California. The species is also found in other regions of the southwest, where it occupies chaparral, pinyon and juniper woodland, and sagebrush habitats. This species typically arrives in California in March and departs in August or September, except for a small portion of the population that winters in the Anza-Borrego Desert (CDFW 2025e).	Moderate-quality suitable foraging and nesting habitat consisting of chaparral habitat is located within the survey area. No CNDDB records have been documented within five miles of the survey area. One Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. **Foraging: High Potential** **Nesting: High Potential**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Least Bell's vireo	*Vireo bellii pusillus*	FE, SE	Yes	This species is a migratory songbird that typically occupies riparian woodland habitat within or adjacent to wet areas and prefers areas that support an understory of dense young willows or mule fat, with a canopy of tall mature willows. This species typically arrives in San Diego County in March and departs for its wintering range in Mexico in late August or early September. Individuals exhibit high site tenacity and often return to the same territories over successive years. The breeding season generally lasts from April through July, and nests are usually constructed in low thickets along willow-dominated riparian habitat (SDG&E 2023).	Moderate-quality suitable nesting and foraging habitat consisting of coast live oak riparian forest, riparian forest, and riparian woodland is located within the survey area. The most recent CNDDB record of this species was documented in 2016 within 0.2 mile of the survey area, and the nearest CNDDB record of this species was documented in 2012 within the survey area. Additionally, this species was observed during the 2025 field survey. **Foraging: Present** **Nesting: Present**
Prairie falcon	*Falco mexicanus*	WL	No	This species is a year-round resident that occupies grasslands, agricultural fields, rangelands, and desert scrub habitats. The species typically uses sheltered cliff ledges for nesting (CDFW 2025e).	Moderate-quality suitable foraging habitat consisting of non-native grassland, buckwheat scrub, coastal sage scrub, and coastal sage/chaparral mix is located within the survey area. No suitable nesting habitat is located within the survey area. The nearest CNDDB record of this species was documented in 1980 within 4.4 of the survey area. The most recent CNDDB record of this species was documented in 1992 within 4.8 miles of the survey area. **Foraging: Moderate Potential** **Nesting: Absent**
Sharp-shinned hawk	*Accipiter striatus*	WL	No	This species is a winter resident and migrant throughout California. This species breeds in black oak, riparian deciduous, mixed conifer, Jeffrey pine, and Ponderosa pine habitats, though it prefers riparian habitats. This species requires north-facing slopes and plucking perches, occupying all habitats (excluding bare desert, open prairie, and alpine in the winter). This species feeds on small birds and primarily nests in dense, small stands of conifers near water (CDFW 2025e).	High-quality suitable nesting and foraging habitat consisting of riparian woodlands and forest is located within the survey area. The most recent SanBIOS record of this species was documented in 2014 within 2.6 miles of the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Moderate Potential** **Nesting: Moderate Potential**
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL	No	This species is a year-round resident that occupies chaparral and coastal sage scrub habitats in California. The species prefers steep, rocky hillsides with grass and forb patches for foraging and nesting (CDFW 2025e).	High-quality suitable nesting and foraging habitat consisting of chaparral is located within the survey area. The nearest CNDDB record of this species was documented in 2003 within 0.5 mile of the survey area. The nearest recent CNDDB record of this species was documented in 2015 within 2.6 miles of the survey area. Additionally, one Sweetwater Authority record of this species was documented in 2003 within 0.1 mile of the survey area. **Foraging: Moderate Potential** **Nesting: Moderate Potential**
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, SE	Yes	This species is a migratory songbird that occupies riparian woodlands and thickets associated with the presence of very moist soil conditions and/or surface water, as well as thick understory vegetation often dominated by willows; however, migrants may be located among any larger trees or shrubs. Nesting sites are usually near a stream, standing water, or seep, and they are typically built 1.5 to 10 feet from the ground (SDG&E 2023).	Low-quality suitable nesting and foraging habitat consisting of riparian woodland and forest is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Low Potential** **Nesting: Low Potential**
Swainson's hawk	*Buteo swainsoni*	ST	No	This species occurs in open grasslands, prairies, and farmlands that have nearby trees for nesting. It nests in bushes and in several tree species, including oak (*Quercus* spp.), willow, and eucalyptus, and this species usually nests in trees in riparian areas near open fields. This species primarily hunts small rodents, rabbits, birds, and reptiles during the breeding season. This species largely lives off insects, such as grasshoppers and beetles, during the non-breeding season. This species reproduces from March through April, has an incubation period of 34 to 35 days, and fledges six weeks later (CDFW 2025e).	Low-quality suitable nesting and foraging habitat consisting of riparian woodland, riparian forest, and non-native grassland is located within the survey area. No recent CNDDB records of this species are located within five miles of the survey area, and the nearest CNDDB record of this species was documented in 1920 within 3.8 miles of the survey area. **Foraging: Low Potential** **Nesting: Low Potential**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Tricolored blackbird	*Agelaius tricolor*	ST, SSC	Yes	This highly colonial species requires open water, protected nesting substrate, and foraging areas adjacent to the colony with insect prey. Breeding occurs near fresh water, often in emergent wetlands with tall, dense cattails (*Typha* spp.) or tules (*Schoenoplectus* spp.), but also in thickets of willow; blackberry (*Rubus* spp.); wild rose; or tall, dense forbs. Seeds and cultivated grains, such as rice and oats, compose most of its fall and winter diet. Tricolored blackbird forages on the ground in croplands, grassy fields, flooded land, and along the edges of ponds. The breeding season usually occurs from mid-April to late July (CDFW 2025e).	Low-quality suitable foraging habitat consisting of riparian woodland and forest is located within the survey area. No suitable nesting habitat is located within the survey area due to the absence of cattails or thickets near open water. No recent CNDDB records of this species have been documented within five miles of the survey area. The most recent and nearest CNDDB record of this species was documented in 2000 within 2.4 miles of the survey area. **Foraging: Low Potential** **Nesting: Absent**
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC	No	This species is a year-round resident in California that nests in desert riparian habitat consisting of mesquite (*Prosopis* spp.), willow, cottonwood, and other vegetation adjacent to irrigated fields, pastures, and other open mesic areas. This species feeds on flying insects on the outer edges of low trees, shrubs, and tall herbs, and this species also forages for insects on the ground (CDFW 2025e).	Moderate-quality suitable foraging and nesting habitat consisting of riparian woodland and forest is located within the survey area. The most recent SanBIOS record of this species was documented in 1999 within 0.8 mile of the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Moderate potential** **Nesting: Moderate potential**
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, SE, USFSS	Yes	This species is a rare summer visitor to San Diego County that occupies riparian woodland habitat consisting of willows, Fremont cottonwoods (*Populus fremontii*), narrow-leaf cottonwoods (*Populus angustifolia*), and mesquite. This species typically arrives in California and Arizona in late spring during the end of May and into July, departing for its wintering range in Mexico as late as October. Breeding of this migrant species has not been confirmed within San Diego County in decades (SDG&E 2023).	Low-quality suitable nesting and foraging habitat consisting of riparian woodland and forest is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Foraging: Low Potential** **Nesting: Low Potential**
White-tailed kite	*Elanus leucurus*	FP	No	This species is a year-round resident in coastal and valley lowlands, primarily near agricultural regions. This species feeds on rodents that are typically associated with agricultural crops, and this species occasionally feeds on other birds, insects, reptiles, amphibians, and mammals. Undisturbed farmland, grasslands, and wetlands serve as foraging ground where the species hovers above the ground to hunt prey. Breeding season occurs from February to October, with nests placed near the tops of dense willow, oak, and other tree stands (CDFW 2025e).	Low-quality suitable foraging habitat consisting of non-native grassland and buckwheat scrub is located within the survey area. Low-quality suitable nesting habitat consisting of riparian woodland and riparian forest is located within the survey area. One SanBIOS record of this species was documented in 2012 within 0.8 miles of the survey area. **Foraging: Low Potential** **Nesting: Low Potential**
Yellow-breasted chat	*Icteria virens*	SSC	No	This species is a migrant and summer resident in California that occurs within riparian habitat from sea level to approximately 5,000 feet elevation. Riparian habitats typically have a well-developed shrub layer and open canopy. This species typically occurs in California from late March to late September (CDFW 2025e).	High-quality suitable nesting and foraging habitat consisting of riparian forest, riparian woodland, and coast live oak riparian forest is located within the survey area. One CNDDB record of this species was documented in 1994 within four miles of the survey area. The nearest and most recent Sweetwater Authority record of this species was documented in 2003 within 0.1 mile of the survey area. This species was observed during the 2025 field survey. **Foraging: Present** **Nesting: Present**
Yellow rail	*Coturnicops noveboracensis)*	SSC, USFSS	No	This species is a rare year-round resident in California that breeds in sedge marshes/meadows with moist soil or shallow standing water. Wintering birds occupy wet meadows and coastal tidal marshes (CDFW 2025e).	No suitable habitat for this species is located within the survey area. One CNDDB record of this species was documented in 1998 within 4.1 miles of the survey area. Only two occurrences of this species are recorded in eBird within San Diego County: one north of the city of Santee and another in Mission Bay (eBird 2025). **Foraging: Absent** **Nesting: Absent**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Yellow warbler	*Setophaga petechia*	SSC	No	This species is a migratory songbird that typically breeds in riparian woodlands throughout San Diego County. This species typically feeds on insects and spiders. This species typically arrives in California in April, and most individuals have migrated by October (CDFW 2025e).	High-quality suitable nesting and foraging habitat consisting of riparian forest, riparian woodland, and coast live oak riparian forest is located within the survey area. No CNDDB records of this species are located within five miles of the survey area. The nearest and most recent Sweetwater Authority record of this species was documented in 2021 within 0.1 mile of the survey area. This species was observed during the 2025 field survey. **Foraging: Present** **Nesting: Present**
Crustaceans					
San Diego fairy shrimp	*Branchinecta sandiegonensis)*	FE	Yes	This species occurs in seasonally ponded waters, including vernal pools and road-ruts in Orange and San Diego counties, as well as adjacent northwestern Baja California. Habitat where vernal pools are likely found includes grasslands, agricultural areas, coastal sage scrub, and chaparral communities that contain tectonic swales or earth slump basins. Vernal pools in San Diego County where this species is known to occur include areas within Marine Corps Base Camp Pendleton and Marine Corps Air Station Miramar, as well as areas including Kearny Mesa, Del Mar Mesa, Lopez Ridge, Mira Mesa, Proctor Valley, and Otay Mesa (SDG&E 2023).	Although the survey area is within the geographic range of the species, suitable vernal pool habitat for this species is not located within the survey area. Additionally, no CNDDB records of this species have been documented within five miles of the survey area. **Absent**
Fish					
Arroyo chub	*Gila orcutti*	SSC, USFSS	No	This species is a small cyprinid native to coastal drainages of Los Angeles, Orange, Riverside, and San Diego counties. Typically, this species is found in slow-moving sections of cool to warm (50 to 79°F) streams dominated by sand and silt substrates (O'Brien and Barabe 2022).	The survey area is not within the known range of this species. No CNDDB records of this species have been recorded within five miles of the survey area. **Absent**
Insects					
Crotch's bumble bee	*Bombus crotchii*	SCE	No	This species occurs in open grassland and scrub habitats and is frequently known to associate with plants in the Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae families. This species primarily nests underground in soft, disturbed soil, under leaf litter, or within small mammal burrows (Williams et al. 2014).	High-quality suitable habitat consisting of coastal sage/chaparral mix, buckwheat scrub, non-native grassland, chaparral, and coastal sage scrub is located within the survey area. One CNDDB record of this species was documented in 2020 within 2.6 miles of the survey area. No Bumble Bee Watch Database records of this species have been documented within five miles of the survey area. **Moderate Potential**
Hermes copper butterfly	*Lycaena hermes*	FT, USFSS, HCPA	Yes	This species primarily occupies coastal sage scrub and chaparral habitats that support its larval host plant, spiny redberry, and other nectar sources for adult butterflies, such as California buckwheat, chamise, slender sunflower (*Helianthus gracilentus*), poison oak, and shortpod mustard (*Hirschfeldia incana*). Hermes copper butterfly individuals undergo diapause as eggs from late summer through winter, hatch in the spring, and spend their peak active period as adults foraging and breeding from May through July. During this active period, females lay eggs exclusively on spiny redberry shrubs. The Hermes copper butterfly is rarely found more than 100 yards from its larval host plant in a single season (SDG&E 2023).	High-quality suitable habitat consisting of buckwheat scrub, coastal sage/chaparral mix, chaparral, and coastal sage scrub is located within the survey area. The species' host plant was observed during the 2025 field survey. Additionally, the survey area is located within USFWS-designated critical habitat for this species. The nearest recent CNDDB record of this species was documented in 2005 within 0.3 mile of the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2011 within the survey area. **High Potential**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Monarch butterfly	*Danaus plexippus*	FPT, USFSS	No	This species occurs in overwinter roost sites extending along the coast of North America from northern Mendocino in California to Baja California in Mexico. Overwintering sites are typically located in wind-protected tree groves of eucalyptus, Monterey pine (*Pinus radiata*), or cypress (Cupressaceae) with nectar and water sources nearby. This species requires milkweed (*Asclepias* spp.), its larval host plant, for breeding (USFWS 2024a).	Suitable habitat for this species consisting of coastal sage/chaparral mix, chaparral, coastal sage scrub, non-native grassland, woodlands, and buckwheat scrub is located within the survey area. The species' host plant was not observed during the field surveys. No CNDDB records of this species or overwintering sites have been documented within five miles of the survey area. The survey area is within the geographic migratory/breeding range of this species; however, environmental conditions within the survey area are not suitable for overwintering. This species was observed during the 2025 field survey. **Overwintering: Absent** **Migratory/Breeding: Present**
Quino checkerspot butterfly	*Euphydryas editha quino*	FE	No[2]	This species occurs in scrublands; patchy shrub or small tree landscapes with openings between large plants, or landscapes of open swales alternating with dense patches of shrubs. This species primarily occupies coastal sage scrub, chaparral, and desert scrub with 50 percent shrub cover or less. Adults deposit eggs on several species of annual host plants, including dot-seed plantain (*Plantago erecta*), Patagonia plantain (*Plantago patagonica*), Coulter's snapdragon (*Antirrhinum coulterianum*), and *Collinsia* spp. There is usually one generation of adults per year, although larvae may remain in diapause (i.e., summer dormancy) for multiple years prior to maturation (SDG&E 2007).	Moderate-quality suitable habitat for this species consisting of coastal sage scrub is located within the survey area. Additionally, the species' host plant was observed during the 2025 field survey. The nearest recent CNDDB record of this species was documented in 2017 within 4.1 miles of the survey area. The nearest historic CNDDB record was documented in 2003 within the survey area. **Moderate Potential**
Mammals					
American badger	*Taxidea taxus*	SSC	No	This species is an uncommon, permanent resident in California, thriving in drier, open habitats with friable soils. This species primarily feeds on fossorial rodents and digs burrows for cover and reproduction (CDFW 2025e).	Moderate-quality suitable habitat consisting of coastal sage scrub, non-native grassland, and buckwheat scrub is located within the survey area. The nearest and most recent CNDDB record was documented in 2014 within 0.5 mile of the survey area. **High Potential**
Big free-tailed bat	*Nyctinomops macrotis*	SSC	No	This species is a rare, year-round resident in California, primarily occupying rugged, rocky canyons. This species roosts in buildings, caves, and occasionally holes in trees, and this species feeds mainly on large moths (CDFW 2025e).	Moderate-quality suitable foraging and roosting habitat consisting of chaparral is located within the survey area. One CNDDB record of this species was documented in 1989 within 2.5 miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**
Fringed myotis	*Myotis thysanodes*	USFSS	No	This species is widespread year-round in California but it prefers pinyon and juniper woodland, valley-foothill hardwood, and hardwood conifer habitats. This species roosts in caves, mines, buildings, and crevices. This species feeds mostly on beetles, but also on moths, arachnids, and orthopterans (CDFW 2025e).	Moderate-quality suitable foraging and roosting habitat is located throughout the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**
Mexican long-tongued bat	*Choeronycteris mexicana*	SSC	No	This species is found within the southwestern U.S. and is rare to irregular in southern California. The species sometimes migrates into Mexico for the winter and is found in desert shrublands, deep mountain canyons with dense riparian vegetation, montane oak-conifer woodlands and forests, and tropical deciduous forests. This species roosts in caves, rock fissures, old mines, and buildings (on rare occasions). Food sources include nectar, fruits and pollen primarily from mainly from columnar cacti, agave, and *Fouquieria* spp. (Nature Serve 2025).	Moderate-quality suitable habitat consisting of landscaped/ornamental habitat is located within the survey area. One CNDDB record of this species was documented in 1996 within 3.9 miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**

[2] The Quino checkerspot butterfly is covered independently under SDG&E's Quino Checkerspot Butterfly Low-Effect Habitat Conservation Plan.

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Pallid bat	*Antrozous pallidus*	SSC, USFSS	No	This is a locally common species in low-elevation areas of California. This species occupies a wide variety of habitats, including grasslands, shrublands, woodlands, and forests. This species roosts in caves, crevices, and mines, and occasionally in hollow trees and buildings. This species feeds on a wide variety of insects and arachnids (CDFW 2025e).	Moderate-quality suitable habitat consisting of riparian woodland, riparian forest, coast live oak forest, coast live oak riparian forest, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest CNDDB record of this species was documented in 1974 within 2.5 miles of the survey area. The most recent CNDDB record of this species was documented in 2002 within 2.8 miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC	No	This species is a year-round resident in California, occupying pinyon and juniper woodland, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitats. This species roosts in rock crevices in cliffs, and this species forages on flying insects (CDFW 2025e).	Moderate-quality suitable foraging habitat consisting of coastal sage/chaparral mix, chaparral, and coastal sage scrub is located within the survey area. The nearest CNDDB record of this species was documented in 2002 within 0.4 mile of the survey area. The most recent CNDDB record of this species was documented in 2003 within two miles of the survey area. **Roosting: Absent** **Foraging: Moderate Potential**
San Diego desert woodrat	*Neotoma lepida intermedia*	SSC	No	This species occupies a variety of habitat and is common to abundant in Joshua tree, pinyon and juniper woodland, mixed and chamise-redshank chaparral, and sagebrush habitats, as well as most desert habitats. Within coastal scrub habitats, the species prefers live oak, chamise, and buckwheat as food plants (CDFW 2025e).	Moderate-quality suitable habitat consisting of buckwheat scrub, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest CNDDB record of this species was documented in 1994 within the survey area. The most recent CNDDB record of this species was documented in 2006 within 4.5 miles of the survey area. **Moderate Potential**
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, USFSS	No	This species is a year-round resident in California, occupying a variety of habitats. This species roosts in caves, mines, tunnels, buildings, or other human-made structures for roosting, and this species forages primarily on small moths (CDFW 2025e).	Moderate-quality suitable habitat consisting of riparian woodland, riparian forest, coast live oak forest, coast live oak riparian forest, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest CNDDB record of this species was documented in 1963 within 1.5 miles of the survey area. The nearest recent CNDDB record of this species was documented in 2010 within 4.9 miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**
Western mastiff bat	*Eumops perotis californicus*	SSC	No	This species is an uncommon, year-round resident in California, occupying conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban habitats. This species roosts in crevices in cliff faces, high buildings, trees, and tunnels, and this species forages on a variety of flying insects (CDFW 2025e).	Moderate-quality suitable habitat consisting of riparian woodland, riparian forest, coast live oak forest, coast live oak riparian forest, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest CNDDB record of this species was documented in 2002 within 0.4 mile of the survey area. The most recent CNDDB record of this species was documented in 2003 within two miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Western red bat	*Lasiurus frantzii*	SSC	No	This species is a year-round resident in California, but the species may migrate within the state between winter and summer. This species occupies grasslands, shrublands, open woodlands and forests, and agricultural habitats. This species primarily roosts in trees that are in edge habitats. This species forages on a variety of flying insects (CDFW 2025e).	Moderate-quality suitable habitat consisting of oak woodland, riparian woodland, riparian forest, coast live oak forest, coast live oak riparian forest, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. One CNDDB record of this species was documented in 2002 within 2.4 miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**
Western yellow bat	*Lasiurus xanthinus*	SSC	No	This species is a year-round resident in California, occupying valley-foothill riparian, desert riparian, desert wash, and palm oasis habitats. This species roosts in trees, particularly palms, and this species forages on flying insects, usually over water and among trees (CDFW 2025e).	Moderate-quality suitable habitat consisting of riparian woodland, riparian forest, coast live oak forest, and coast live oak riparian forest is located within the survey area. The nearest CNDDB record of this species was documented in 1979 within 2.7 miles of the survey area. The most recent CNDDB record of this species was documented in 1995 within 3.3 miles of the survey area. **Roosting: Moderate Potential** **Foraging: Moderate Potential**
Mollusks					
Warner Spring shoulderband snail	*Rothelix warnerfontis*	USFSS	No	This species is known only to occur within a ravine just below Lost Valley Spring near Warner Springs (CDFW 2025e).	The survey area is not within the geographic range of the species. No CNDDB records of this species have been recorded within five miles of the survey area. **Absent**
Reptiles					
California glossy snake	*Arizona elegans occidentalis*	SSC	No	This species is most common in desert habitats, but the species also occurs in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass habitats. This species is primarily nocturnal and feeds mainly on a variety of lizards (CDFW 2025e).	High-quality suitable habitat consisting of buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest recent CNDDB record of this species was documented in 2016 within 3.6 miles of the survey area. The nearest historic CNDDB record of this species was documented in 1933 within 0.7 mile of the survey area. **Moderate Potential**
Coast horned lizard	*Phrynosoma blainvillii*	SSC	Yes	This species occupies a variety of habitat in San Diego County, including annual grassland, coastal sage scrub, chaparral, and woodland habitats. This species primarily forages on native ant populations. This species prefers open country, especially washes, floodplains, and other sandy areas (SDG&E 2023).	Moderate-quality suitable habitat consisting of woodlands, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest recent CNDDB record of this species was documented in 2007 within 1.2 miles of the survey area. The nearest historic CNDDB record of this species was documented in 2004 within the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. This species was observed during the 2025 field survey. **Present**
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC	No	This species occupies chaparral and coastal scrub habitats, and this species primarily feeds on lizards. This species is most active in May and June (Thompson et al. 2016).	High-quality suitable habitat consisting of buckwheat scrub, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. One CNDDB record of this species was documented in 1996 within the survey area. This species was observed during the 2025 field survey. **Present**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
Coastal rosy boa	*Lichanura orcutti*	USFSS	No	This species occupies arid scrublands, semi-arid shrublands, rocky shrublands, rocky deserts, canyons, and other rocky areas. This species feeds on rodents, small birds, lizards, small snakes, and amphibians (California Herps 2025b).	High-quality suitable habitat consisting of coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. This species was observed during the 2025 field survey. **Present**
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	No	This species occupies coastal sage scrub, chaparral, riparian areas, woodlands, and rocky areas. This diurnal lizard feeds on insects, spiders, scorpions, as well as other small arthropods, including larvae stages (Thompson et al. 2016).	High-quality suitable habitat consisting of woodlands, riparian forest, coast live oak forest, coast live oak riparian forest, buckwheat scrub, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest CNDDB record of this species was documented in 1996 within 1.3 miles of the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. This species was observed during the 2025 field survey. **Present**
Coronado skink	*Plestiodon skiltonianus interparietalis*	WL	No	This species occupies a variety of habitats favoring early successional stages or open areas. This species primarily feeds on insect eggs, adult and larval beetles, caterpillars, moths, grasshoppers, crickets, insect larvae, ants, spiders, centipedes, and sow bugs (CDFW 2025e).	Moderate-quality suitable habitat consisting of buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest CNDDB record of this species was documented in 1996 within 1.3 miles of the survey area. No recent CNDDB records of this species have been documented within five miles of the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2011 within the survey area. **High Potential**
Orange-throated whiptail	*Aspidoscelis hyperythra*	WL, USFSS	No	This species is a diurnal lizard found in low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. The species prefers washes and other sandy areas with patches of brush and rocks, and this species primarily feeds on small arthropods (CDFW 2025e).	High-quality suitable habitat consisting of buckwheat scrub, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest recent CNDDB record of this species was documented in 2007 within 1.2 mile of the survey area. The nearest historic CNDDB record of this species was documented in 1996 within the survey area. The nearest and most recent Sweetwater Authority record of this species was documented in 2021 within the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2010 within the survey area. **High Potential**
Red-diamond rattlesnake	*Crotalus ruber*	SSC, USFSS	No	This species occupies chaparral, woodland, and arid desert habitats in rocky areas and dense vegetation and feeds on rabbits, rodents, lizards, birds, and other snakes (CDFW 2025e).	High-quality suitable habitat consisting of woodlands, riparian forest, coast live oak forest, coast live oak riparian forest, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. The nearest and most recent CNDDB record of this species was documented in 2011 within the survey area. This species was observed during the 2025 field survey. **Present**
San Diego banded gecko	*Coleonyx variegatus abbotti*	SSC	No	This species is restricted to rocky areas within coastal sage and chaparral habitat. This species is nocturnal, seeking shelter under rocks or in burrows, and this species feeds on small invertebrates (Thompson et al. 2016).	High-quality suitable habitat consisting of buckwheat scrub, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. One CNDDB record of this species was documented in 2017 within 3.8 miles of the survey area. **Moderate Potential**

Common Name	Scientific Name	Listing Status[1]	SDG&E HCP Amendment Covered Species?	Natural History	Potential to Occur in the Survey Area
San Diego mountain kingsnake	*Lampropeltis zonata pulchra*[3]	USFSS	No	This species occurs in a variety of habitats including valley-foothill hardwood, and hardwood-conifer, mixed and montane chaparral, valley-foothill riparian, coniferous forests, and wet meadows. This species feeds on lizards, smaller snakes, nestling birds and bird eggs, and small mammals (CDFW 2025e).	High-quality suitable habitat consisting of riparian woodland, riparian forest, coast live oak forest, coast live oak riparian forest is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
San Diego ringneck snake	*Diadophis punctatus similis*	USFSS	No	This species is most common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats. This species feeds on earthworms, salamanders, treefrogs, small lizards, and small snakes (CDFW 2025e).	High-quality suitable habitat consisting of buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located within the survey area. No CNDDB records of this species have been documented within five miles of the survey area. **Moderate Potential**
Southern California legless lizard	*Anniella stebbinsi*	SSC, USFSS	No	This species is found in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Soil moisture and loose textured soils are key habitat components. This species feeds primarily on insect larvae, beetles, termites, and spiders (California Herps 2025c, CDFW 2025e).	High-quality suitable habitat consisting of coastal sage scrub, chaparral, and coastal sage/chaparral mix, riparian woodland, riparian forest, coast live oak riparian forest is located within the survey area. The nearest recent CNDDB record of this species was documented in 2011 within the survey area. The nearest and most recent Sunrise Powerlink Project record of this species was documented in 2011 within 0.5 mile of the survey area. **High Potential**
Southwestern pond turtle	*Actinemys pallida*	FPT, SSC, USFSS	Yes	This species typically occurs at elevation ranges from near sea level to 4,690 feet. The species is associated with permanent or nearly permanent water in a wide variety of habitat types. Pond turtles require basking sites, such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. This species also requires upland habitat that is suitable for nesting and overwintering. The home range is normally quite restricted. During the spring or early summer, females move overland for up to 325 feet to find suitable sites for egg-laying (SDG&E 2023).	High-quality suitable aquatic breeding habitat consisting of riparian woodland and riparian forest associated with Loveland Reservoir, Sweetwater River, and Taylor Creek is located within the survey area. Suitable upland nesting and overwintering habitat consisting of coast live oak forest, buckwheat scrub, non-native grassland, coastal sage scrub, chaparral, and coastal sage/chaparral mix is located with the survey area adjacent to suitable aquatic breeding habitat. The nearest and most recent CNDDB record of this species was documented in 2010 within 2.3 miles of the survey area. **Aquatic/Breeding: Moderate Potential** **Upland: Moderate Potential**
Two-striped gartersnake	*Thamnophis hammondii*	SSC, USFSS	No	This species is often found in or near permanent and intermittent freshwater streams, creeks, and pools. Associated habitats include willow, oak woodlands, cedar, coastal sage scrub, sparse pine, scrub oak, and chaparral. This species feeds on a variety of prey including fish, fish eggs, frogs, salamanders, leeches, and earthworms (Thompson et al. 2016).	High-quality suitable habitat consisting of coastal sage scrub, chaparral, and coastal sage/chaparral mix, woodlands, riparian forest, coast live oak riparian forest is located within the survey area. The nearest recent CNDDB record of this species was documented in 2008 within one mile of the survey area. One Sweetwater Authority record of this species was documented in 2021 within 0.2 mile of the survey area. One Sunrise Powerlink Project record of this species was documented in 2010 within 0.1 mile of the survey area. **High Potential**

Sources: California Herps 2025a, California Herps 2025b, California Herps 2025c, CDFW 2025d, CDFW 2025e, Nature Serve 2025, O'Brien and Barabe 2022, SDG&E 2007, SDG&E 2023, SanGIS 2025, Thomson et al. 2016, USFWS 2022, USFWS 2024b, USFWS 2025b, USFWS 2025c, Williams et al. 2014, Xerces 2025a, and Xerces 2025b.

[3] This species is also known as *Lampropeltis multifasciata*.

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ATTACHMENT 3.5-G: SPECIAL-STATUS WILDLIFE SPECIES OCCURRENCES IN THE VICINITY OF THE PROPOSED PROJECT AREA

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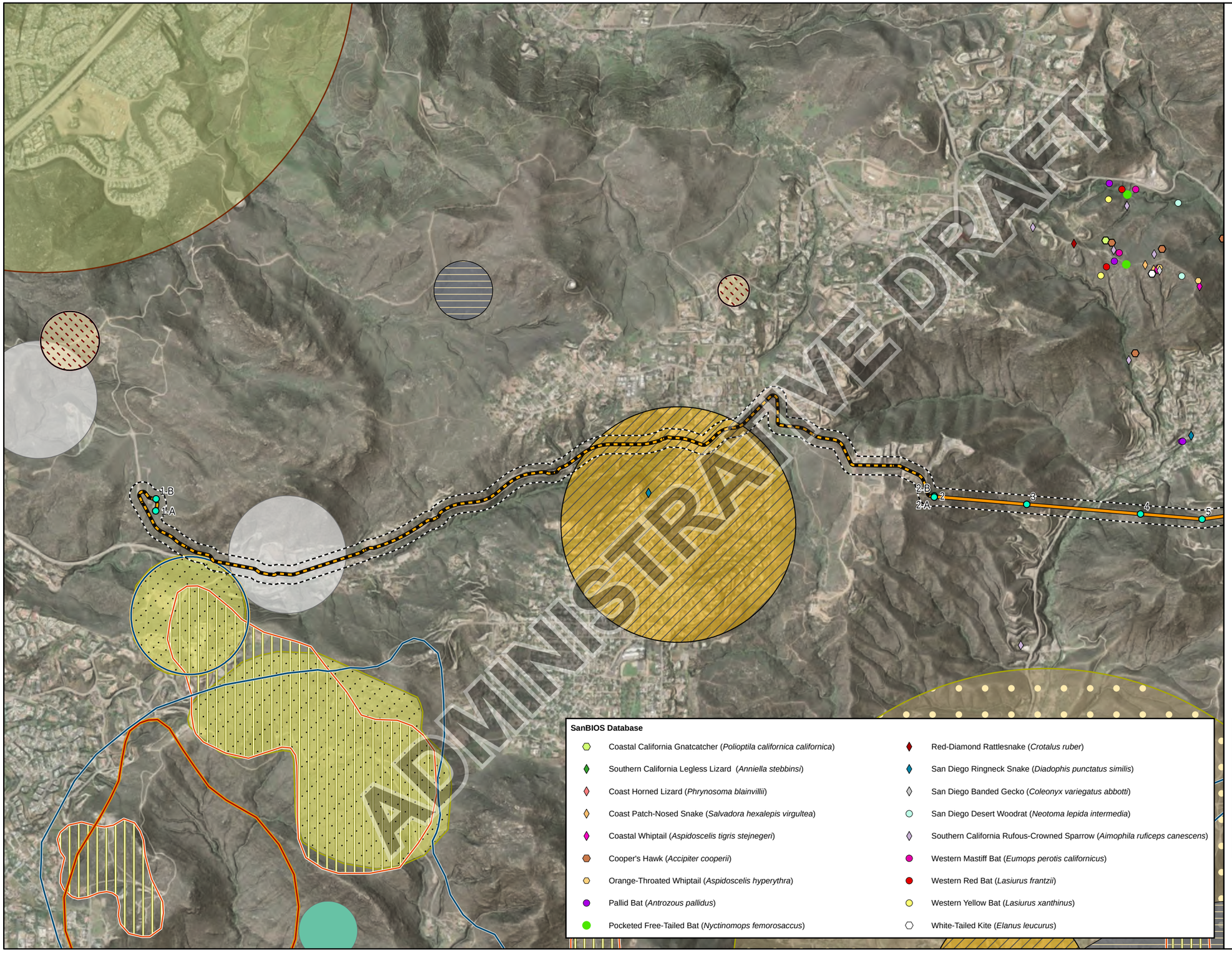
Attachment 3.5-G:
Special-Status Wildlife Species Occurrences within the Vicinity of the Proposed Project Area
Map 1 of 4

Suncrest
230 Kilovolt Loop-In Project



Survey Area

Project Components

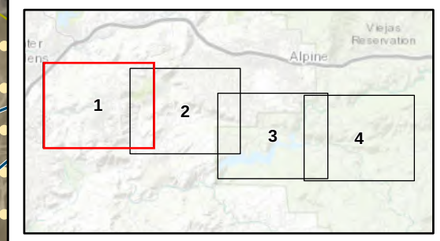
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment

California Natural Diversity Database

- American Badger (*Taxidea taxus*)
- California Glossy Snake (*Arizona elegans occidentalis*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Hermes copper butterfly (*Lycaena hermes*)
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)
- Southern California Legless Lizard (*Anniella stebbinsi*)
- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Western Mastiff Bat (*Eumops perotis californicus*)
- Western Spadefoot (*Spea hammondii*)

SanBIOS Database

- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Southern California Legless Lizard (*Anniella stebbinsi*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Coast Patch-Nosed Snake (*Salvadora hexalepis virgultea*)
- Coastal Whiptail (*Aspidoscelis tigris stejnegeri*)
- Cooper's Hawk (*Accipiter cooperii*)
- Orange-Throated Whiptail (*Aspidoscelis hyperythra*)
- Pallid Bat (*Antrozous pallidus*)
- Pocketed Free-Tailed Bat (*Nyctinomops femorosaccus*)
- Red-Diamond Rattlesnake (*Crotalus ruber*)
- San Diego Ringneck Snake (*Diadophis punctatus similis*)
- San Diego Banded Gecko (*Coleonyx variegatus abbotti*)
- San Diego Desert Woodrat (*Neotoma lepida intermedia*)
- Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)
- Western Mastiff Bat (*Eumops perotis californicus*)
- Western Red Bat (*Lasiurus frantzii*)
- Western Yellow Bat (*Lasiurus xanthinus*)
- White-Tailed Kite (*Elanus leucurus*)



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Attachment 3.5-G:
Special-Status Wildlife Species Occurrences within the Vicinity of the Proposed Project Area
Map 2 of 4

Suncrest
230 Kilovolt Loop-In Project

Survey Area

Project Components

Proposed Pole Location

Proposed 230 kV OH Segment

California Natural Diversity Database

American Badger (*Taxidea taxus*)

Coast Horned Lizard (*Phrynosoma blainvillii*)

Coastal California Gnatcatcher (*Polioptila californica californica*)

Orange-throated Whiptail (*Aspidoscelis hyperythra*)

Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Southern California Legless Lizard (*Anniella stebbinsi*)

Townsend's Big-Eared Bat (*Corynorhinus townsendii*)

Western Spadefoot (*Spea hammondii*)

SanBIOS Database

Bell's Sparrow (*Amphispiza belli belli*)

Coastal California Gnatcatcher (*Polioptila californica californica*)

Coast Horned Lizard (*Phrynosoma blainvillii*)

Coast Patch-Nosed Snake (*Salvadora hexalepis virgultea*)

Coastal Whiptail (*Aspidoscelis tigris stejnegeri*)

Cooper's Hawk (*Accipiter cooperii*)

Orange-Throated Whiptail (*Aspidoscelis hyperythra*)

Pallid Bat (*Antrozous pallidus*)

Pocketed Free-Tailed Bat (*Nyctinomops femorosaccus*)

Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Red-Diamond Rattlesnake (*Crotalus ruber*)

San Diego Ringneck Snake (*Diadophis punctatus similis*)

San Diego Banded Gecko (*Coleonyx variegatus abbotti*)

San Diego Desert Woodrat (*Neotoma lepida intermedia*)

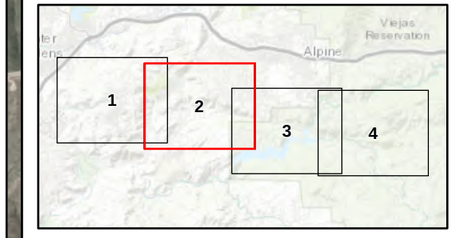
Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)

Western Mastiff Bat (*Eumops perotis californicus*)

Western Red Bat (*Lasiurus frantzii*)

Western Yellow Bat (*Lasiurus xanthinus*)

White-Tailed Kite (*Elanus leucurus*)



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Attachment 3.5-G:
Special-Status Wildlife Species Occurrences within the Vicinity of the Proposed Project Area
Map 3 of 4

Suncrest
230 Kilovolt Loop-In Project

ADMINISTRATIVE DRAFT

Pocketed Free-Tailed Bat

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 35.1 36 37 38 39 39.1 40

Survey Area

Project Components

- Proposed Pole Location
- Proposed 230 kV OH Segment

Sweetwater Authority Data

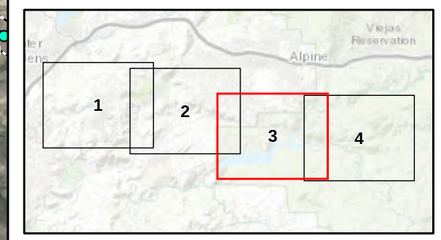
- Arroyo Toad (*Anaxyrus californicus*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Southern California Rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Two-Striped Gartersnake (*Thamnophis hammondii*)
- Yellow Warbler (*Setophaga petechia*)
- Yellow-breasted Chat (*Icteria virens*)
- Willow Flycatcher (*Empidonax traillii*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Coastal California Gnatcatcher (*Polioptila californica californica*)

California Natural Diversity Database

- Arroyo Toad (*Anaxyrus californicus*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*)
- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Cooper's Hawk (*Accipiter cooperii*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Pocketed Free-tailed Bat (*Nyctinomops femorosaccus*)
- Quino Checkerspot Butterfly (*Euphydryas editha quino*)
- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Western Mastiff Bat (*Eumops perotis californicus*)
- Western Spadefoot (*Spea hammondii*)

SanBIOS Database

- Bell's Sparrow (*Amphispiza belli belli*)
- Orange-Throated Whiptail (*Aspidoscelis hyperythra*)
- Pocketed Free-Tailed Bat (*Nyctinomops femorosaccus*)
- Quino Checkerspot Butterfly (*Euphydryas editha quino*)
- Red-Diamond Rattlesnake (*Crotalus ruber*)
- Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)
- Western Mastiff Bat (*Eumops perotis californicus*)



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Attachment 3.5-G:
Special-Status Wildlife Species Occurrences within the Vicinity of the Proposed Project Area
Map 4 of 4

Suncrest
230 Kilovolt Loop-In Project

ADMINISTRATIVE DRAFT

Survey Area
Existing Suncrest Substation

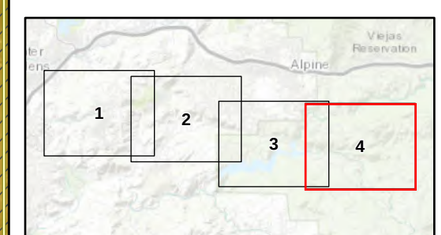
Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment

Sunrise Powerlink Project Data
- Hermes Copper Butterfly (*Lycaena hermes*)
- Loggerhead Shrike (*Lanius ludovicianus*)
- Red Diamond Rattlesnake (*Crotalus ruber*)
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- San Diego Horned Lizard (*Phrynosoma coronatum blainvillii*)
- Two-striped Garter Snake (*Thamnophis hammondii*)

Sweetwater Authority Data
- Arroyo Toad (*Anaxyrus californicus*)
- Yellow-breasted Chat (*Icteria virens*)
- Least Bell's Vireo (*Vireo bellii pusillus*)

California Natural Diversity Database
- Arroyo Toad (*Anaxyrus californicus*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*)
- Cooper's Hawk (*Accipiter cooperii*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Orange-throated Whiptail (*Aspidoscelis hyperythra*)
- Red-diamond Rattlesnake (*Crotalus ruber*)
- Southern California Legless Lizard (*Anniella stebbinsi*)
- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)
- Western Spadefoot (*Spea hammondii*)

SanBIOS Database
- Arroyo Toad (*Anaxyrus californicus*)
- Bell's Sparrow (*Amphispiza belli belli*)
- Coast Horned Lizard (*Phrynosoma blainvillii*)
- Hermes Copper (*Lycaena hermes*)
- Red-Diamond Rattlesnake (*Crotalus ruber*)
- Two-Striped Gartersnake (*Thamnophis hammondii*)



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ATTACHMENT 3.5-H: SPECIAL-STATUS WILDLIFE OBSERVED WITHIN THE SURVEY AREA

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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 1 of 14

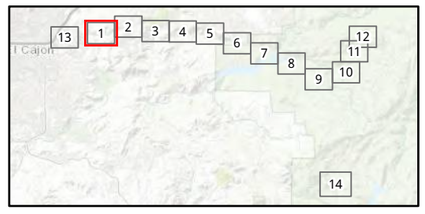
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV Western UG Segment

Incidental Observations
- Hermes Copper Butterfly Host Plant
- Quino Checkerspot Butterfly Host Plant

Vegetation Communities and Land Covers
- Agricultural
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental



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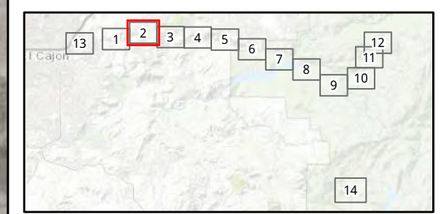
Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 2 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Proposed 230 kV Western UG Segment
Incidental Observations
Red-Diamond Rattlesnake (Crotalus ruber)
Vegetation Communities and Land Covers
Bare Ground
Chaparral
Coast Live Oak Riparian Forest
Coastal Sage Scrub
Coastal Sage/Chaparral Mix
Developed
Disturbed
Landscaped/Ornamental
Open Oak Woodland



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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 3 of 14

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components

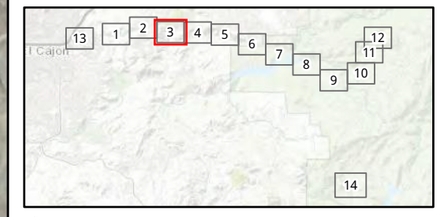
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment

Incidental Observations

- Hermes Copper Butterfly Host Plant
- Quino Checkerspot Butterfly Host Plant

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Concrete Lined Channel
- Developed
- Disturbed
- Landscaped/Ornamental



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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 4 of 14

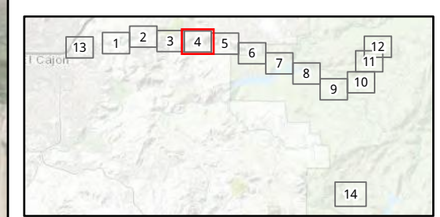
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Incidental Observations
- Red-Diamond Rattlesnake (Crotalus ruber)
- Hermes Copper Butterfly Host Plant

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Disturbed



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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 5 of 14

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components

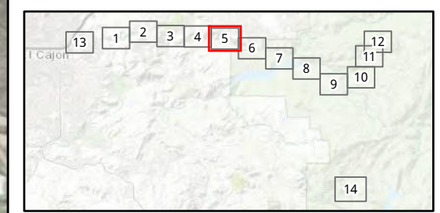
- Proposed Pole Location
- Proposed 230 kV OH Segment

Incidental Observations

- Red-Diamond Rattlesnake (Crotalus ruber)

Vegetation Communities and Land Covers

- Bare Ground
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Disturbed
- Riparian Woodland



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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 6 of 14

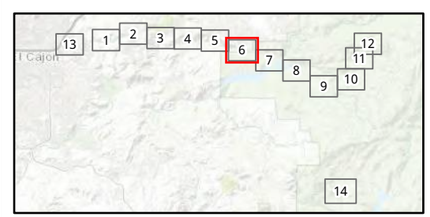
Suncrest 230 Kilovolt Loop-In Project

- Survey Area

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Incidental Observations
- Coast Horned Lizard (Phrynosoma blainvillii)
- Coastal Whiptail (Aspidoscelis tigris stejnegeri)
- Cooper's Hawk (Astur cooperii)
- Monarch Butterfly (Danaus plexippus)

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Riparian Woodland



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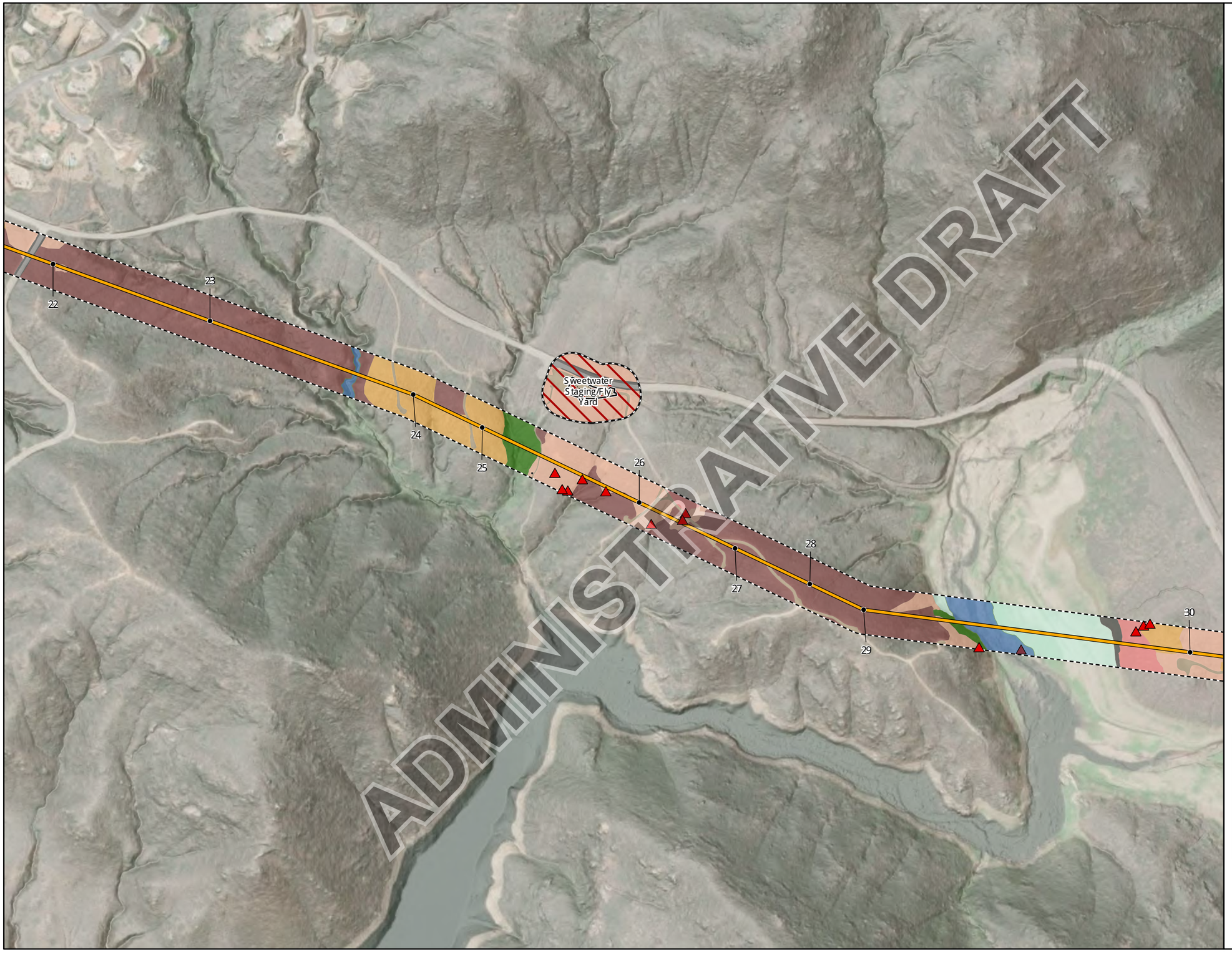

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Attachment 3.5-H:
Special-Status Wildlife Observed within the Survey Area
Map 7 of 14

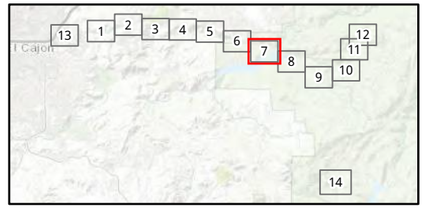
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Staging Yard/Fly Yard

Incidental Observations
- Yellow-Breasted Chat (Icteria virens)
- Hermes Copper Butterfly Host Plant
- Quino Checkerspot Butterfly Host Plant

Vegetation Communities and Land Covers
- Bare Ground
- Buckwheat Scrub
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Non-Vegetated
- Riparian Woodland



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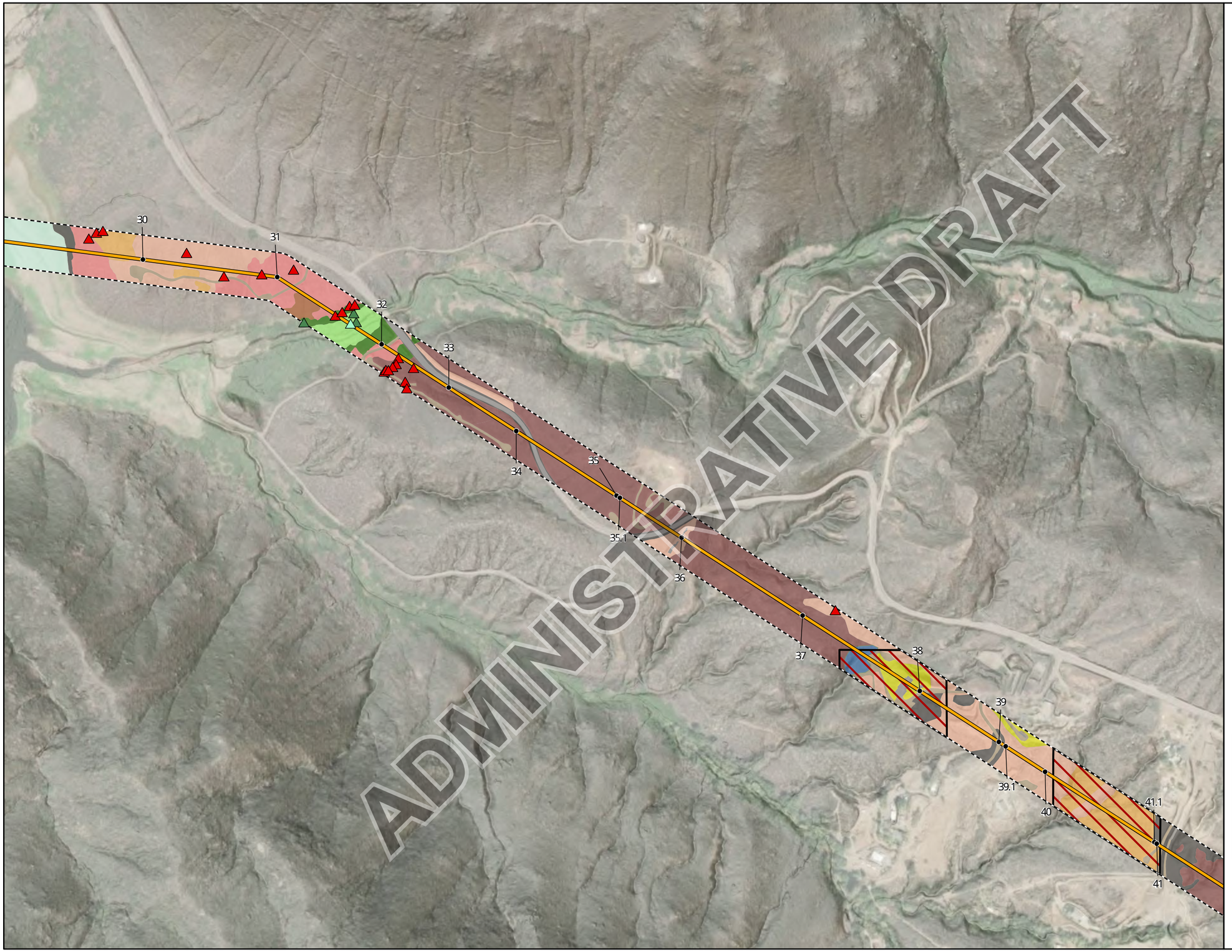


Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 8 of 14

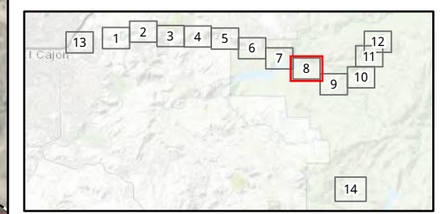
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components
- Proposed Pole Location
- Proposed 230 kV OH Segment

Incidental Observations
- Least Bell's Vireo (Vireo bellii pusillus)
- Yellow Warbler (Setophaga petechia)
- Hermes Copper Butterfly Host Plant

Vegetation Communities and Land Covers
- Bare Ground
- Buckwheat Scrub
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental
- Non-Native Grassland
- Non-Vegetated
- Riparian Forest
- Riparian Woodland



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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 9 of 14

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed

Project Components

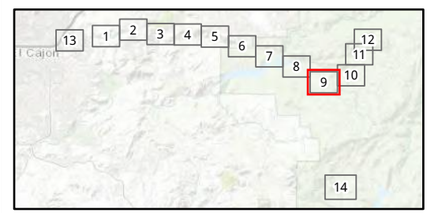
- Proposed Pole Location
- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard

Incidental Observations

- Coastal Rosy Boa (Lichanura orcutti)

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Landscaped/Ornamental
- Riparian Forest



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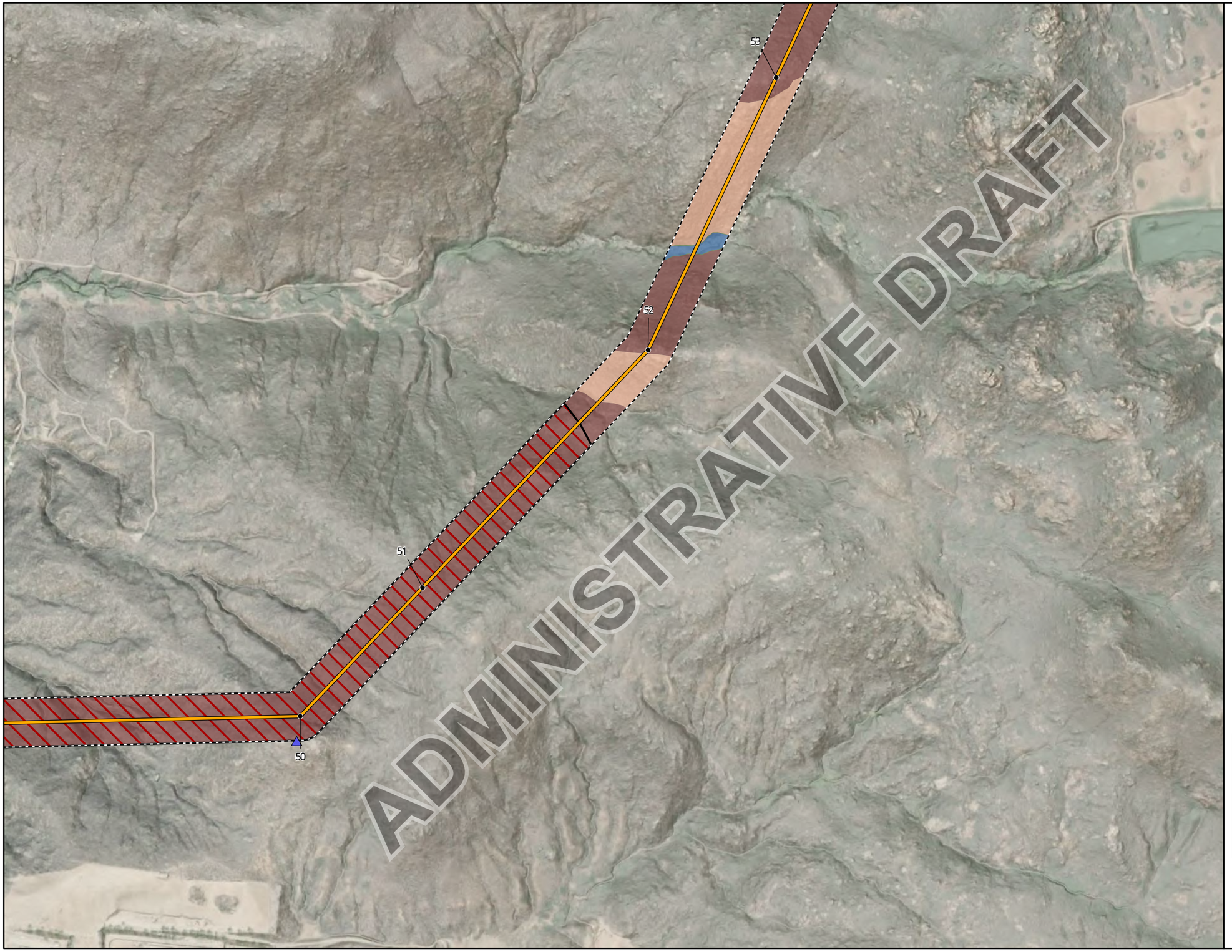
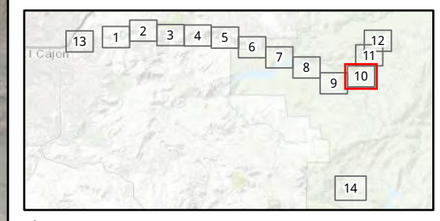


Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 10 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Proposed Pole Location
Proposed 230 kV OH Segment
Incidental Observations
Red-Diamond Rattlesnake (Crotalus ruber)
Vegetation Communities and Land Covers
Chaparral
Coastal Sage Scrub
Riparian Woodland



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Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 11 of 14

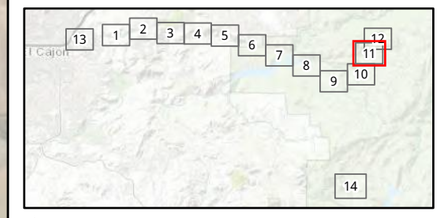
Suncrest 230 Kilovolt Loop-In Project

- Survey Area

Project Components
- Proposed Pole Location
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV OH Segment
- Existing Suncrest Substation

Incidental Observations
- Bald Eagle (Haliaeetus leucocephalus)
- Coast Patch-Nosed Snake (Salvadora hexalepis virgultea)
- Hermes Copper Butterfly Host Plant

Vegetation Communities and Land Covers
- Bare Ground
- Chaparral
- Coast Live Oak Riparian Forest
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Open Engelmann Oak Woodland
- Riparian Woodland



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ADMINISTRATIVE DRAFT

Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 12 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area

Project Components

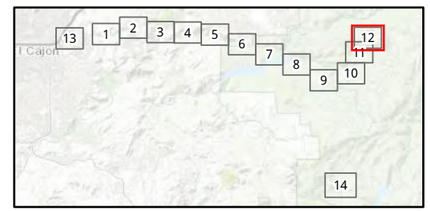
- Proposed Pole Location
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV OH Segment
- Existing Suncrest Substation

Incidental Observations

- Bald Eagle (Haliaeetus leucocephalus)
- Coast Patch-Nosed Snake (Salvadora hexalepis virgultea)
- Hermes Copper Butterfly Host Plant

Vegetation Communities and Land Covers

- Bare Ground
- Chaparral
- Coastal Sage Scrub
- Coastal Sage/Chaparral Mix
- Developed
- Disturbed
- Open Engelmann Oak Woodland
- Open Oak Woodland



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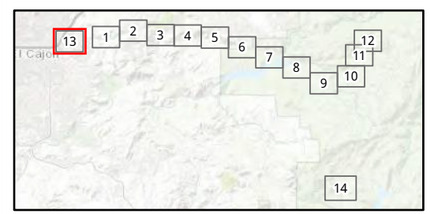
SDGE

Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 13 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Staging Yard
Vegetation Communities and Land Covers
Bare Ground
Developed
Disturbed
Landscaped/Ornamental



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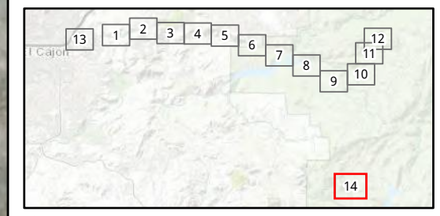
SDGE

ADMINISTRATIVE DRAFT

Attachment 3.5-H:
Special-Status Wildlife Observed
within the Survey Area
Map 14 of 14

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed
Project Components
Staging Yard
Staging Yard/Fly Yard
Vegetation Communities and Land Covers
Bare Ground
Chaparral
Coastal Sage/Chaparral Mix
Disturbed
Non-Native Grassland



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ATTACHMENT 3.5-I: LOCAL POLICIES AND ORDINANCES CONSISTENCY ANALYSIS

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ATTACHMENT 3.5-I: LOCAL POLICIES AND ORDINANCES CONSISTENCY ANALYSIS

Plan or Policy	Consistent? (Yes/No)	Explanation
County of San Diego General Plan		
Policy COS-1.2: Minimize Impacts. Prohibit private development within established preserves. Minimize impacts within established preserves when the construction of public infrastructure is unavoidable.	Yes	San Diego Gas & Electric Company (SDG&E) designed the Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) components in a manner that would minimize the footprint within Preserves or Proposed Preserves to the extent feasible. However, a portion of the Proposed Project alignment would occur within established Preserves or Proposed Preserves included in the General Plan. SDG&E would implement the applicant-proposed measures (APMs) described in the Environmental Impact Report (EIR) to avoid and minimize impacts to species and habitat within established Preserves or Proposed Preserves in order to protect the species and habitat that occur within the Preserves or Proposed Preserves. Unavoidable temporary impacts within Preserves or Proposed Preserves would be restored in accordance with the Habitat Restoration Plan, as required in APM BIO-02. Additionally, SDG&E would provide compensatory mitigation for permanent impacts that are unavoidable to species and habitat within Preserves or Proposed Preserves, in accordance with the mitigation measures (MMs) outlined in Section 3.5 Biological Resources. Therefore, the Proposed Project is consistent with this policy.
Policy COS-1.9: Invasive Species. Require new development adjacent to biological preserves to use non-invasive plants in landscaping. Encourage the removal of invasive plants within preserves.	Yes	SDG&E would avoid and minimize the removal of native vegetation during Proposed Project activities and would restore temporarily impacted areas to pre-Proposed Project grade and contours in accordance with the Habitat Restoration Plan. As dictated by the Habitat Restoration Plan, native species characteristic of the adjacent native vegetation communities would be used for any plantings or seed mixtures. Additionally, SDG&E would implement APM BIO-14 to prevent the spread of invasive weed species where feasible. No landscaping is anticipated around the existing Suncrest Substation or along the proposed 230 kV transmission line. Therefore, the Proposed Project is consistent with this policy.
Policy COS-2.1: Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories.	Yes	SDG&E would avoid and minimize impacts to special-status species habitats in accordance with APMs BIO-01 through BIO-21. Temporary impacts would be kept to the minimum required to construct the Proposed Project, and all temporarily disturbed areas would be restored to pre-construction grade and contours in accordance with the Habitat Restoration Plan. Additionally, SDG&E would implement MMs to compensate for permanent impacts to native vegetation communities that occur outside of Preserves or Proposed Preserves to reduce any impacts to natural habitats within lands designated as Semi-Rural and Rural Lands. Therefore, the Proposed Project is consistent with this policy.
Policy COS-2.2: Habitat Protection through Site Design. Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.	Yes	SDG&E designed the Proposed Project to avoid biologically sensitive areas, such as wetlands and riparian habitats, to the extent feasible. The Proposed Project would cross some native vegetation communities that are considered sensitive. SDG&E would minimize loss to natural habitat, including sensitive habitats, when feasible and would restore temporarily impacted native vegetation in accordance with the Habitat Restoration Plan, in accordance with APM BIO-02. Additionally, SDG&E would implement MMs to compensate for permanent impacts to any sensitive areas based on the specific mitigation ratio provided for the type of sensitive habitat area. Therefore, the Proposed Project is consistent with this policy.
Policy COS-3.1: Wetland Protection. Require development to preserve existing natural wetland areas and associated transitional riparian and upland buffers and retain opportunities for enhancement.	Yes	SDG&E sited all Proposed Project components away from wetlands and waters. Some temporary workspaces would overlap with some riparian areas adjacent to waters, but these areas would be restored to the pre-Proposed Project grade and contours and revegetated in accordance with the approved Habitat Restoration Plan. Surveys have not been completed for all areas of the Proposed Project; however, any waters identified in the surveyed areas would be avoided by moving Proposed Project components or SDG&E would be required to obtain regulatory approvals and implement all avoidance, minimization, and mitigation measures associated with those approvals. Therefore, the Proposed Project is consistent with this policy.
Policy COS-3.2: Minimize Impacts of Development. Require development projects to: • Mitigate any unavoidable losses of wetlands, including its habitat functions and values; and • Protect wetlands, including vernal pools, from a variety of discharges and activities, such as dredging or adding fill material, exposure to pollutants such as nutrients, hydromodification, land and vegetation clearing, and the introduction of invasive species.	Yes	SDG&E sited all Proposed Project components in a manner that fully avoids impacts to waters within the Proposed Project area. No wetlands were identified within the Proposed Project area. Surveys have not been completed for all areas of the Proposed Project; however, any waters identified in the unsurveyed areas would be avoided by moving Proposed Project components or SDG&E would be required to obtain regulatory approvals and implement all avoidance, minimization, and mitigation measures associated with those approvals. The Proposed Project would not result in any loss of waters or wetlands. SDG&E would implement best management practices (BMPs) to ensure that work areas upslope of any waters would be contained in the work area and do not impact the waters. Additionally, SDG&E would also implement measures to ensure that any impacted areas upslope of any waters are restored to prevent the spread of invasive weed species. Therefore, the Proposed Project is consistent with this policy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Policy COS-5.4: Invasive Species. Encourage the removal of invasive species to restore natural drainage systems, habitats, and natural hydrologic regimes of watercourses.	Yes	SDG&E would implement invasive weed BMPs in accordance with APM BIO-14 to prevent the spread of invasive species within the Proposed Project area. This measure would minimize the dispersal of invasive species from Proposed Project activities. Additionally, any temporarily impacted areas that would be restored to pre-Proposed Project grade and contours would also be planted with native species characteristic of the adjacent native vegetation communities. While actively removing invasive species is not proposed as part of the Proposed Project, some invasive species may be present in temporarily impacted areas and would be removed during Proposed Project activities. The impacted areas would then be restored according to the Habitat Restoration Plan with native species that are characteristic of the adjacent native vegetation communities. Therefore, the Proposed Project is consistent with this policy.
Policy COS-11.7: Underground Utilities. Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.	Yes	SDG&E designed the Proposed Project to be co-located where practical, with the proposed 230 kV overhead (OH) segment paralleling SDG&E's Sunrise Powerlink 500 kV transmission line south of the existing Suncrest Substation, then paralleling SDG&E's Transmission Line (TL) 625 after crossing Japatul Road. Some portions of the Proposed Project would be undergrounded where appropriate, including in the area approaching the existing Suncrest Substation and on the western portion of the proposed 230 kV transmission line between Poles 1 and 2. Therefore, the Proposed Project is consistent with this policy.
Policy COS-14.11: Native Vegetation. Require development to minimize the vegetation management of native vegetation while ensuring sufficient clearing is provided for fire control.	Yes	SDG&E would need to clear native vegetation from temporary and permanent workspaces during construction. SDG&E would implement avoidance and minimization measures to reduce impacts to native vegetation communities during construction to the extent feasible and in accordance with APMs BIO-15 through 17. SDG&E would also implement APM BIO-09 to help with fire control and wildfire prevention. Additionally, any temporarily impacted vegetation communities would be restored to pre-project grade and contours and restored in accordance with the Habitat Restoration Plan. The Habitat Restoration Plan would include procedures to reduce weed encroachment and expected timeframes and success criteria for restoration. Therefore, the Proposed Project is consistent with this policy.
County of San Diego Biological Mitigation Ordinance		
Section 86.505. Project Design Criteria. **Project Design Criteria**. Impacts to Critical Populations of Sensitive Plant Species Within the MSCP subarea (Attachment C), Significant Populations of Rare, Narrow Endemic Animal Species Within the MSCP Subarea (Attachment D of Document No. 0769999 on file with the Clerk of the Board), Narrow Endemic Plant Species Within the MSCP Subarea (Attachment E of Document No. 0769999 on file with the Clerk of the Board), or San Diego County Sensitive Plants, as defined herein, and impacts to land determined to be a Biological Resource Core Area shall be avoided to the maximum extent practicable by using the following design criteria: (1) Project development shall be sited in areas which minimize impact to habitat. (2) Clustering to the maximum extent permitted by County regulations shall be considered where necessary as a means of achieving avoidance. (3) Notwithstanding the requirements of the Slope Encroachment Regulations contained within the Resource Protection Ordinance, effective October 10, 1991, projects shall be allowed to utilize design which may encroach into steep slopes to avoid impacts to habitat. (4) The County shall consider reduction in road standards to the maximum extent consistent with public safety considerations. (5) Projects shall be required to comply with applicable design criteria in the County MSCP Subarea Plan, attached hereto as Attachment G of Document No. 0769999 (Preserve Design Criteria) on file with the Clerk of the Board) and Attachment H (of Document No. 0769999 (Design Criteria for Linkages and Corridors) on file with the Clerk of the Board).	Yes	Although SDG&E does not require discretionary approval from the County of San Diego (County) for the Proposed Project, SDG&E designed the Proposed Project to avoid sensitive plant and animal habitats to the maximum extent feasible. SDG&E also designed the alignment on a variety of steep slopes or hilltops to avoid impacts to sensitive habitats and species. In regions where the Proposed Project would overlap with sensitive populations for some species and their habitat, SDG&E would adhere to the species-specific respective MMs that require additional surveys within suitable habitat for the species, the presence of a biological monitor during Proposed Project activities, and mitigation for permanent impacts within occupied habitat for the species. Therefore, the Proposed Project is consistent with this ordinance.

Plan or Policy	Consistent? (Yes/No)	Explanation
Section 86.506. Habitat Based Mitigation. **Mitigation Requirements.** The following section specifies the process for determining mitigation requirements for sensitive habitats: **(1) Determination Whether Land Qualifies as Biological Resource Core Area.** The impact site and the mitigation site shall be evaluated to determine if either or both sites qualify as a Biological Resource Core Area. **a) The impact site is a Biological Resource Core Area if it meets one or more of the following criteria:** i) The land is shown as preapproved mitigation area on the wildlife agencies' preapproved mitigation map, (Attachment F of Document No. 0769999 on file with the Clerk of the Board). ii) The land is located within an area of habitat which contains biological resources that support or contribute to the long-term survival of Sensitive Species, which determination is based upon a biological analysis approved by the Director, and is adjacent or contiguous to preserved habitat that is within the preapproved mitigation area on the wildlife agencies' preapproved mitigation map (Attachment F of Document No. 0769999 on file with the Clerk of the Board); iii) The land is part of a regional linkage/corridor. A regional linkage/corridor is either: A. Land which contains topography which serves to allow for the movement of all sizes of wildlife and is used by wildlife, including large animals on a regional scale; and contains adequate vegetation cover providing visual continuity so as to encourage the use of the corridor by wildlife; or B. It has been identified as the primary linkage/corridor between the northern and southern regional populations of the California gnatcatcher in the population viability analysis for the California gnatcatcher, MSCP Resource Document Volume II, Appendix A-7 (Attachment I on file with the Clerk of the Board as Document No. 0769999). iv) The land is shown on the Habitat Evaluation Map (Attachment J of Document No. 0769999 on file with the Clerk of the Board) as Very High or High and links significant blocks of habitat, except that land which is isolated or links small, isolated patches of habitat and land that has been affected by existing development to create adverse edge effects shall not qualify as Biological Resource Core Area; v) The land consists of or is within a block of habitat greater than 500 acres in area of diverse and undisturbed habitat that contributes to the conservation of Sensitive Species; vi) The land contains a high number of Sensitive Species and is adjacent or contiguous to surrounding undisturbed habitats, or contains soil derived from the following geologic formations which are known to support Sensitive Species: A. gabbroic rock; B. metavolcanic rock; C. clay; D. coastal sandstone. **b) The mitigation Site is a Biological Resource Core area if it meets one or more of the criteria listed below.** A vegetation map of the proposed mitigation site may be required to determine whether the criteria are met. i) The land is part of a conservation bank recognized by the Wildlife Agencies as contributing to a HCP/NCCP Plan and located within the MSCP Subarea Boundary Map Area; or ii) The land meets any or all of the criteria identified in Section 86.506 above.	Yes	The Proposed Project would occur within and adjacent to Preserves or Proposed Preserves and habitat areas that can serve as potential wildlife corridors and includes areas that meet the Biological Resources Core Area definition. SDG&E designed the Proposed Project to minimize impacts to Preserves or Proposed Preserves and to avoid sensitive habitats to the extent feasible. However, the Proposed Project would still occur within Biological Resource Core Areas and have unavoidable impacts on habitat. SDG&E would implement compensatory MMs for permanent impacts to special-status federally and/or state-listed and/or California Rare Plant Rank (CRPR) 1B or 2B species and their habitat within Preserves or Proposed Preserves at a higher ratio than for impact areas occurring outside the Preserves or Proposed Preserves. Mitigation would occur within land that is part of a conservation bank recognized by the Wildlife Agencies as contributing to a Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) in the Multiple Species Conservation Program (MSCP) Subarea Boundary Map Area. Therefore, the Proposed Project is consistent with this ordinance.

Plan or Policy	Consistent? (Yes/No)	Explanation
Section 86.506. Habitat Based Mitigation. **Mitigation Requirements.** The following section specifies the process for determining mitigation requirements for sensitive habitats: **(2) Determination of Tier on Impact Site**. Based on the information in the vegetation map prepared pursuant to Section 85.504, the tier level of the impact site shall be identified in accordance with the List of San Diego County Vegetation Communities and Tier Levels Within the MSCP (Attachment K of Document No. 0769999 on file with the Clerk of the Board).	Yes	The Proposed Project does not require discretionary approval from the City of San Diego, and the Proposed Project is therefore not subject to this ordinance. The Proposed Project would require compensatory mitigation for unavoidable impacts to vegetation communities and species habitat inside and outside of established Preserves or Proposed Preserves. The vegetation communities that would be permanently impacted by the Proposed Project fall into Tiers I (i.e., coast live oak riparian forest), II (i.e., buckwheat scrub, coastal sage scrub, and coastal sage scrub/chaparral mix) and III (i.e., chaparral) identified in Attachment K of this ordinance. SDG&E would implement MMs for in-kind compensatory mitigation to compensate for loss of native vegetation communities and species habitat within Preserves or Proposed Preserves. The mitigation ratios are consistent with other HCP/NCCP requirements. Therefore, the Proposed Project is consistent with this ordinance.
Section 86.506. Habitat Based Mitigation. **Mitigation Requirements.** The following section specifies the process for determining mitigation requirements for sensitive habitats: **(3) Determination of Tier on Mitigation site.** The tier level of the mitigation site shall be identified in accordance with the List of San Diego County Vegetation Communities and Tier Levels Within the MSCP (Attachment K on file with the Clerk of the Board as Document No. 0769999). Mitigation for impacts to vegetation communities within the MSCP Subarea shown on the MSCP Boundary Map (Attachment A of Document No. 0769999 on file with the Clerk of the Board) shall occur in vegetation communities within the MSCP Subarea; however, if mitigation is not feasible (capable of being accomplished with a reasonable amount of effort and cost) within the MSCP Subarea, mitigation may occur on land covered by another approved MSCP subarea plan. Mitigation outside the MSCP Subarea will only be allowed when an applicant has demonstrated a good faith effort to mitigate within the MSCP Subarea and has shown that such mitigation is not feasible, to the satisfaction of the Director of the Department of Planning and Land Use. Mitigation shall be within a habitat tier equal to or greater than the impact site with two exceptions: a) Mitigation may be out of tier if mitigation credits are acquired from a mitigation bank located within the MSCP Subarea, and use of the credits is consistent with Board of Supervisors Policy I-117 (Attachment L of Document No. 0769999 on file with the Clerk of the Board). b) Mitigation must be in-kind for the following types of habitat: Southern Maritime Chaparral, Maritime Succulent Scrub, and vegetation communities specified under the category “Wetlands” in Tier I, the List of San Diego County Vegetation Communities and Tier Levels Within the MSCP (Attachment K of Document No. 0769999 on file with the Clerk of the Board).	Yes	The Proposed Project does not require discretionary approval from the City of San Diego, and the Proposed Project is therefore not subject to this ordinance. The Proposed Project would require compensatory mitigation for unavoidable impacts to vegetation communities and species habitat inside established Preserves or Proposed Preserves at a 2:1 ratio for upland vegetation communities and at a 3:1 ratio for wetland and riparian areas. All permanent impacts to natural vegetation communities occurring outside of Preserves or Proposed Preserves would be mitigated at a 1:1 ratio. These mitigation ratios align with the requirements for Tiers I, II and III for the scenario in which the impacted land occurs in a biological resources core area and the mitigation site does not meet the biologic resources core area criteria. Therefore, these mitigation ratios align with the most conservative estimates of the required Tiers I, II, and III mitigation for the Proposed Project. SDG&E would implement MMs for in-kind compensatory mitigation to compensate for the loss of native vegetation communities and species habitat within Preserves or Proposed Preserves. The location of the mitigation area would be determined based on the approved Preserves or Proposed Preserves in the existing HCP/NCCP. Therefore, the Proposed Project would be consistent with this ordinance.
Section 86.506. Habitat Based Mitigation. **Mitigation Requirements.** The following section specifies the process for determining mitigation requirements for sensitive habitats: **(4) Determination of the Mitigation Ratio.** Using the Table of Mitigation Ratios (Attachment M of Document No. 0769999 on file with the Clerk of the Board), determine the mitigation ratio by locating the tier of the vegetation community to be impacted, based on whether the impact site and mitigation site are Biological Resource Core Areas.	Yes	The Proposed Project does not require discretionary approval from the County, and the Proposed Project is therefore not subject to this ordinance. Approximately 3.93 and 23.08 acres of habitat are anticipated to be permanently and temporarily impacted, respectively, for the Proposed Project within County Preserves or Proposed Preserves. SDG&E would implement MMs for habitat as detailed in Section 3.5 Biological Resources to compensate for the loss of native vegetation communities. Mitigation ratios are higher for Preserves or Proposed Preserves than for areas outside of the Preserves or Proposed Preserves. Impacts to sensitive habitats within Preserves of Proposed Preserves would be mitigated at a 2:1 ratio for upland vegetation communities and at a 3:1 ratio for wetland and riparian areas. All permanent impacts to natural vegetation communities occurring outside of Preserves or Proposed Preserves would be mitigated at a 1:1 ratio. These mitigation ratios align with the requirements for Tiers I, II and III for the scenario in which the impacted land occurs in a biological resources core area and the mitigation site does not meet the biologic resources core area criteria. Therefore, these mitigation ratios align with the most conservative estimates of the required Tiers I, II, and III mitigation for the Proposed Project. Therefore, the Proposed Project would be consistent with this ordinance.

Plan or Policy	Consistent? (Yes/No)	Explanation
Section 86.507. Species-Based Mitigation. The following section specifies the process for determining mitigation requirements for sensitive plant populations and for sensitive animal populations. **(1) Sensitive Plant Populations.** **a) Critical Populations of Sensitive Plant Species.** During project design, first priority shall be given to avoidance of impacts populations of sensitive plant species listed on the Critical Populations of Sensitive Plant Species Within the MSCP subarea (Attachment C of Document No. 0769999 on file with the Clerk of the Board). Where complete avoidance is infeasible, County staff will work with the project proponent to design the project to minimize impacts to the Critical Population to the maximum extent practicable. **b) Avoidance of Sensitive Plants.** Impacts to Narrow Endemic Plant Species Within the MSCP Subarea (Attachment E of Document No. 0769999 on file with the Clerk of the Board), or Sensitive Plant Species, as defined, that meet the criteria in Group A or B shall be avoided to the maximum extent practicable. Where complete avoidance is infeasible, encroachment may be authorized depending on the sensitivity of the individual species and the size of the population except that encroachment shall not exceed 20% of the population on-site. Where impacts are allowed, in-kind preservation shall be required at a 1:1 to 3:1 ratio depending on the sensitivity of the species and population size, as determined in a biological analysis approved by the Director. **c) Mitigation for Sensitive Plant Species in Groups C and D.** Sensitive Plant Species, as defined, in Groups C and D shall be protected by using the design requirements and habitat-based mitigation requirements set forth in Section 86.505 and Section 86.506. Notwithstanding the foregoing, when said design requirements and habitat-based mitigation would have the effect of substantially reducing the viability of the affected population or the species, mitigation shall be in-kind, and the mitigation required will be set at a ratio based on the sensitivity of the species and population size, as determined in a biological analysis approved by the Director.	Yes	SDG&E designed the Proposed Project to avoid sensitive plant populations to the extent feasible. No narrow endemic plant species are expected within the Proposed Project work areas. Impacts to Engelmann oak (*Quercus engelmannii*), Munz's sage (*Salvia munzii*), Robinson's pepper grass (*Lepidium virginicum* var. *robinsonii*), rush like bristleweed (*Xanthisma junceum*), and San Diego County viguiera (*Bahiopsis laciniata*) are anticipated to occur during construction of the Proposed Project. Table 3.5-5: Impacts to Occupied Special-Status Plant Species Habitat within the Proposed Project Area details the approximate acreages of temporary and permanent impacts to occupied habitat for these species. Impacts to the habitat of the special-status plant species listed would be less than 20 percent of the population on site within the Proposed Project area. However, SDG&E would restore permanently impacted habitats with a native seed palette in accordance with APM BIO-02 and the Habitat Restoration Plan. The Habitat Restoration Plan would include procedures for restoration activities, procedures to reduce weed encroachment, and expected timeframes and success criteria for restoration. In areas where the Proposed Project would have unavoidable impacts on sensitive plant species, SDG&E would implement avoidance and minimization measures described in the APMs. Construction activities within sensitive-plant species habitat and with known populations would be monitored by a qualified biologist. In addition, all sensitive biological areas within the Proposed Project work areas would be marked prior to construction to restrict construction activities and equipment from entering these areas, as described in APM BIO-01. MMs for permanent impacts would be consistent with the ratio range discussed in this ordinance. Rare plant surveys would be conducted prior to construction activities per MM BIO-01, and SDG&E would compensate for construction-related permanent impacts to special-status federally and/or state-listed and/or CRPR 1B or 2B species as discussed in MM BIO-02. Additionally, the Proposed Project would be co-located where practical, with the proposed 230 kV OH segment would parallel SDG&E's Sunrise Powerlink 500 kV transmission line south of the existing Suncrest Substation, and then would parallel SDG&E's TL625 after crossing Japatul Road. Therefore, the Proposed Project is consistent with this ordinance.
Section 86.507. Species-Based Mitigation. The following section specifies the process for determining mitigation requirements for sensitive plant populations and for sensitive animal populations. **(2) Sensitive Animal Populations.** **a) Rare, Narrow, Endemic Animal Species.** Impacts to Rare, Narrow Endemic Animal Species Within the MSCP subarea (Attachment D of Document No. 0769999 on file with the Clerk of the Board) shall be avoided to the maximum extent practicable. Avoidance requirements shall meet any species specific requirements set forth in Table 3-5 of the MSCP Plan including any applicable limitations on clearing of occupied habitat. Where complete avoidance is infeasible, projects shall be designed to avoid any significant reduction in species viability. **c) Impacts to Arroyo Toad Habitat.** Impacts to upland habitats within 1 km of riparian habitat which supports or is likely to support Arroyo toad shall be minimized to the maximum extent practicable. **d) Management Conditions for *Vireo belli pusillus*, Least Bell's vireo.** Conditions shall be developed for projects located adjacent to Least Bell's Vireo habitat to monitor and control the population of brown-headed cowbirds. **e) Other Sensitive Animal Species**. For other Sensitive animal species as defined in Section 86.508, impacts will be mitigated through habitat based mitigation requirements as set forth in Section 86.506. In any case in which mitigation would have the effect of substantially reducing the viability of the affected population or the species, mitigation shall be in kind and the mitigation required will be set at a ratio based on the sensitivity of the species and the population size, as determined in a biological analysis approved by the Director.	Yes	SDG&E designed the Proposed Project to avoid sensitive animal habitat to the extent feasible. In areas where construction of the Proposed Project would impact sensitive animal habitat and be unavoidable, SDG&E would implement avoidance and minimization measures described in APMs BIO-01 and BIO-03 through BIO-21 to avoid and reduce impacts to sensitive animal populations and their habitat. Construction activities within sensitive animal habitat would be monitored by a qualified biologist. In addition, all sensitive biological areas within the Proposed Project work areas would be marked prior to construction by a qualified biologist to restrict construction activities and equipment from entering these areas, as described in APM BIO-01. Species-specific MMs for sensitive animals would also be implemented to avoid and minimize impacts to these species, including arroyo toad (*Anaxyrus californicus*), western spadefoot (*Spea hammondii*), least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), Hermes copper butterfly (*Lycaena hermes*), Quino checkerspot butterfly (*Euphydryas editha quino*), southwestern pond turtle, and Crotch's bumble bee (*Bombus crotchii*). Approximately 0.44 and 0.18 acres of suitable habitat for arroyo toad is anticipated to be permanently and temporarily impacted, respectively. As described in APM BIO-20, no grading or vegetation removal activities would occur in the Proposed Project work areas from February 15 through August 31 without a qualified biologist conducting pre-construction nesting bird surveys prior to work. If active nests are detected within work areas, the nest location will be noted and no vegetation/tree trimming or clearing activities would be conducted until nestlings have fledged or the nest fails. If the activity must occur, then a qualified biologist would establish an appropriate buffer zone around the nest and no activities would occur until nestlings have fledged and left the nest area, All temporarily impacted areas would be restored in accordance with the Habitat Restoration Plan. The Habitat Restoration Plan would include restoration activities, procedures to reduce weed encroachment, and expected timeframes and success criteria for restoration. MMs for permanent impacts to suitable sensitive animal habitat are described in the EIR and would be consistent with the most conservative ratios discussed in Attachment M of this ordinance. Additionally, the Proposed Project would be co-located where practical with the proposed 230 kV OH segment paralleling SDG&E's Sunrise Powerlink 500 kV transmission line south of the existing Suncrest Substation, then paralleling SDG&E's TL625 after crossing Japatul Road. Therefore, the Proposed Project is consistent with this ordinance.

Plan or Policy	Consistent? (Yes/No)	Explanation
Section 86.507. Species-Based Mitigation. The following section specifies the process for determining mitigation requirements for sensitive plant populations and for sensitive animal populations. **(4) Grading Limitations for Specific Species.** The following limitations shall apply to grading activities in areas where the identified species occur: a) *Campylorhynchus brunneicapillus cousei*, Coastal cactus wren – No clearing of occupied habitat shall occur between February 15 through August 15. b) *Polioptila californica californica*, California gnatcatcher - No clearing of occupied habitat shall occur between March 1 through August 15. c) *Vireo belli pusillus*, Least Bell's vireo - No clearing of occupied habitat shall occur between March 15 and September 15. d) *Empidonax traillii extimus*, Southwestern willow flycatcher – No clearing of occupied habitat shall occur between May 1 and September 1.	Yes	As discussed in the APMs in Section 3.5 Biological Resources, SDG&E would implement general avian protection measures to avoid and minimize impacts to avian species. These measures include pre-construction nesting bird surveys during nesting season (February 15 through August 31). Additionally, species-specific protocols for coastal California gnatcatcher and least Bell's vireo would be implemented for the Proposed Project. No clearing of occupied coastal California gnatcatcher or least Bell's vireo would occur during the periods specified in this ordinance. Therefore, the Proposed Project is consistent with this ordinance.
Section 86.507. Species-Based Mitigation. The following section specifies the process for determining mitigation requirements for sensitive plant populations and for sensitive animal populations. **(5) Other Species Specific Condition Requirements.** As set forth in the terms of the MSCP Plan and/or Subarea Plan, project applicants shall be required to comply with other applicable species specific conditions set forth in Table 3-5 of the MSCP Plan as a condition of project approval.	Yes	SDG&E would implement species-specific MMs as detailed in the EIR, which also include compensatory mitigation for permanent impacts to suitable habitat for the special-status species. Therefore, the Proposed Project is consistent with this ordinance.
County of San Diego Draft Alpine Community Plan		
Goal COS-3: Create an open space system that provides connectivity for the community and wildlife, and provides buffers between open space and developments. **Policy COS-3.1:** Encourage preservation/conservation of open space corridors that connect the community of Alpine to the following: • Cleveland National Forest, • El Capitan and Loveland Reservoirs, and • Sweetwater River Basin.	Yes	Permanent infrastructure and temporary workspaces are sited in a manner that minimizes the footprint within natural, undisturbed areas to the extent feasible. However, portions of the Proposed Project would occur within natural, undisturbed areas included in the Draft Alpine Community Plan. SDG&E would implement the APMs described in the EIR to avoid and minimize impacts to species and habitat within natural, undisturbed land that occur within portions of the Cleveland National Forest, Loveland Reservoir, and Sweetwater River Basin crossed by the Proposed Project. SDG&E would restore any temporarily impacted areas to pre-Proposed Project grade and contours and revegetate in accordance with the Habitat Restoration Plan. The Habitat Restoration Plan includes the use of native species characteristic of the adjacent native vegetation communities for any plantings or seed mixtures, as required in APM BIO-02. Additionally, SDG&E would provide compensatory mitigation for permanent impacts that are unavoidable to species and their suitable habitat impact in accordance with the MMs outlined in Section 3.5 Biological Resources. These MMs would also incidentally mitigate for habitat impacts for native species. Therefore, the Proposed Project is consistent with the Draft Alpine Community Plan.
County of San Diego Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan		
Goal COS-1.1: Retain the natural landscape within the Subregion through the preservation and planned management of environmental resources that prevent wasteful exploitation or degradation of those resources. (combined Formerly General Conservation and Natural Habitat Protection Goals). **Policy COS-1.1.1:** Preserve the integrity and continued function of natural habitat within the Subregion by maximizing the amount of areas left in natural coastal sage scrub cover to ensure its long term value as a vegetation community and wildlife habitat. (Formerly Natural Habitat Protection Policy 1). **Policy COS-1.1.2:** Minimize adverse impacts to areas identified as containing rare and endangered plants within the Subregion. (Formerly Natural Habitat Protection Policy 2). **Policy COS-1.1.3:** Require development to provide buffers around areas of sensitive habitats, and encourage use of native and/or hybrid landscaping plants near sensitive plant species. (Formerly Natural Habitat Protection Policy 3).	Yes	SDG&E designed the Proposed Project components in a manner that aligns with the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan's conservation and open space goals. Goal 1 and the supporting policies aims to protect and retain the natural landscape within the subregion through the preservation and planned management of environmental resources that prevent wasteful exploitation or degradation of those resources. SDG&E would implement the APMs described in the EIR to avoid and minimize impacts to species and habitat within natural, undisturbed land. SDG&E also would restore any temporarily impacted areas to pre-Proposed Project grade and contours and revegetate in accordance with the Habitat Restoration Plan. The Habitat Restoration Plan includes the use of native species characteristic of the adjacent native vegetation communities for any plantings or seed mixtures, as required in APM BIO-02. Additionally, SDG&E would provide compensatory mitigation for permanent impacts that are unavoidable to federally and state-listed species and their habitat, in accordance with the MMs outlined in Section 3.5 Biological Resources. These MMs would also incidentally mitigate for habitat impacts for native species. Therefore, the Proposed Project is consistent with the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan.

Plan or Policy	Consistent? (Yes/No)	Explanation
Goal COS-1.2: Protection of surface water bodies in the Subregion to maintain high quality water resources. **Policy COS-1.2.1:** Require development to set back from the streambeds and their banks, and to protect water courses and associated sensitive resources in their natural, undisturbed forms. (Formerly General Conservation Policy 1). **Policy COS-1.2.2:** Require development on slopes to incorporate measures, such as split level pads in their design, to minimize the need for pad grading to protect downslope areas from erosion and to disperse runoff to adequately allow for filtration and/or infiltrations. (Formerly Soils Policy 2). **Policy COS-1.2.3:** Require development to maximize erosion and siltation control and slope stabilization, whenever grading is required. (Formerly Soils Policy 5). **Policy COS-1.2.4:** Require development to minimize and strategically align, road crossings of watercourses. (Formerly Floodplains and Watercourses Policy 2).	Yes	SDG&E designed the Proposed Project components in a manner that aligns with the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan's conservation and open space goals. Goal 2 and the supporting policies aim to protect surface waterbodies in the subregion to maintain high-quality water resources. SDG&E sited all Proposed Project components away from aquatic features located within the Proposed Project area. Some temporary workspaces will overlap with some riparian areas adjacent to waters, but these areas would be restored to the pre-Proposed Project grade and contours and revegetated in accordance with the approved Habitat Restoration Plan. The Habitat Restoration Plan includes the use of native species characteristic of the adjacent native vegetation communities for any plantings or seed mixtures, as required in APM BIO-02. Additionally, SDG&E would implement construction BMPs in accordance with SDG&E's BMPs Manual for Water Quality Construction to ensure that appropriate erosion protection is used during construction activities. Surveys have not been completed for all areas of the Proposed Project; however, any waters identified in the unsurveyed areas would be avoided by moving Proposed Project components, or SDG&E would be required to obtain required regulatory approvals and implement all avoidance, minimization, and mitigation measures of those approvals. Additionally, no road crossings would be constructed across aquatic features as part of the Proposed Project. Therefore, the Proposed Project is consistent with the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan.
City of El Cajon General Plan		
Policy 8-2.1. The retention of the unique natural features of a development site such as rock outcroppings, native vegetation and trees shall be encouraged	Yes	Only the proposed Hospital Staging Yard would be located within the City of El Cajon. This staging yard and the surrounding areas do not contain any rock outcroppings that would be impacted by Proposed Project components or work areas. Vegetation removal may be required from temporary work areas, but areas would be restored following construction of the Proposed Project in accordance with APM BIO-02. Additionally, any vegetation and tree trimming activities would be conducted in accordance with APMs BIO-15 through 17 to ensure that vegetation is removed only in necessary areas and that any tree trimming in environmentally sensitive areas occurs during the non-sensitive times of year and according to proper arborist standards. No permanent impacts from the Proposed Project are anticipated within the City of El Cajon. Therefore, the Proposed Project is consistent with this policy.
Policy 8-2.3 All graded slopes shall be adequately planted for erosion control.	Yes	Only the proposed Hospital Staging Yard would be located within the City of El Cajon. The yard would be a relatively flat site and minimal grading is anticipated for the site. SDG&E would implement BMPs within all disturbed work areas according to SDG&E's BMPs Manual for Water Quality Construction (e.g., fiber rolls and stockpile management) to ensure soils stay within the Proposed Project work areas. All temporarily disturbed areas would be restored by SDG&E in accordance with APM BIO-02 and revegetated with a mixture of native species characteristic of the adjacent native communities. Therefore, the Proposed Project is consistent with this policy.
Policy 8-7.1 Appropriate measures shall be required for the protection of any rare or endangered animal or plant species located in an area to be developed. Methods of compensation to the property owners should be explored to assist in the preservation of such species.	Yes	Only the proposed Hospital Staging Yard would be located within the City of El Cajon; and due to the developed and disturbed nature of the site, rare or endangered animal or plant species are not anticipated at the site. However, rare or endangered wildlife could be present. SDG&E would implement the APMs in Section 3.5 Biological Resources to avoid and minimize potential impacts to rare and endangered wildlife and plants that are observed. For any potential impacts to federally or state-listed species, SDG&E would also be required to obtain the required regulatory approvals and implement all avoidance, minimization, and mitigation measures of those approvals. No permanent impacts from the Proposed Project are anticipated within the City of El Cajon. Therefore, the Proposed Project would be consistent with this policy.
Policy 8-7.2 The City shall consider imaginative and effective measures to preserve unique species and habitats, including, but not limited to, relocation of the species, creation of open space preserves and transfer of development rights.	Yes	SDG&E would avoid and minimize impacts to species within the Proposed Project area. SDG&E would not have any impacts within Preserves or Proposed Preserves associated with the City of El Cajon, as only the proposed Hospital Staging Yard is located within the City of El Cajon. Any temporarily impacted areas within the City of El Cajon would be restored in accordance with the Habitat Restoration Plan per APM BIO-02. Therefore, the Proposed Project is consistent with this policy.
Policy 8-8.2 The City shall upgrade and improve its landscaping policy which encourages use of vegetation which has low water requirements.	Yes	Only the proposed Hospital Staging Yard would be located within the City of El Cajon. SDG&E would not install any landscaping as part of the Proposed Project. All temporary impact areas would be restored with native plant species that align with the adjacent native vegetation communities. Therefore, the Proposed Project is consistent with this policy.
Policy 8-10.3 The City shall preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. The City will encourage land acquisition of such areas.	Yes	Only the proposed Hospital Staging Yard would be located within the City of El Cajon. This staging yard and surrounding areas do not contain any riparian habitats, waters, or wetlands that would be impacted by the Proposed Project. Therefore, the Proposed Project is consistent with this policy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Policy 8-10.6 The City will avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.	Yes	SDG&E would implement measures in SDG&E's BMPs Manual for Water Quality Construction (e.g., fiber rolls and stockpile management) to ensure soils and other disturbed areas do not experience erosion and sediment loss during the Proposed Project activities. The proposed Hospital Staging Yard would also be a relatively flat site, and minimal ground-disturbing activities would occur at the site during the Proposed Project. Therefore, the Proposed Project is consistent with this policy.

ATTACHMENT 3.5-J: BIOLOGICAL RESOURCES TECHNICAL REPORT

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Attachment 3.5-J: Biological Resources Technical Report is included in the Administrative Draft Environmental Impact Report Volume 2.

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ATTACHMENT 3.5-K: BOTANICAL RESOURCES SURVEY REPORT

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Attachment 3.5-K: Botanical Resources Survey Report is included in the Administrative Draft Environmental Impact Report Volume 2.

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ATTACHMENT 3.5-L: BIOLOGICAL RESOURCE IMPACTS AND MEASURES COMPARISON

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ATTACHMENT 3.5-L: BIOLOGICAL RESOURCES IMPACTS AND MEASURES COMPARISON

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Impact BIO-01: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		
Special-Status Plants – Construction		
Direct Impacts		
Removal or trimming of special-status plants for work area components may result in injury or morality	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-14: Tree Trimming	MM BIO-01. Conduct Supplemental Botanical Field Surveys MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants)
Trampling/trimming/destruction of special-status plants within footpaths/work areas may result in injury or morality	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-14: Tree Trimming	MM BIO-01. Conduct Supplemental Botanical Field Surveys MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants)
Indirect Impacts		
Soil compaction may increase erosion and bury seedlings, interfering with plant growth and population size	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Increased habitat fragmentation and edge effects may allow invasive species to invade and pose a competition risk among plants	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-07: Vehicular Conduct APM BIO-13: Invasive Species Prevention	None Proposed
Increased habitat fragmentation and edge effects may allow invasive species to invade and pose a wildfire risk	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-07: Vehicular Conduct APM BIO-09: Wildfire Prevention APM BIO-13: Invasive Species Prevention	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Fugitive dust may coat leaves and reduce photosynthesis and the ability to grow	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Increase in ground surface disturbance may decrease habitat quality for native species	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Increased habitat fragmentation and edge effects may result in loss of suitable microhabitat conditions for special-status plants and reduced habitat quality	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas	None Proposed
Special-Status Plants – Operations and Maintenance		
Direct Impacts		
Less-than-significant impacts	Not applicable (N/A)	N/A
Indirect Impacts		
Less-than-significant impacts	N/A	N/A
Special-Status Wildlife – Construction		
Amphibian Species		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians
Destruction of upland aestivating/foraging sites may cause injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians
Vegetation clearing activities/impact to suitable habitat may cause injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring	MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	
Entrapment in excavations may cause injury or mortality	APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-15: Trapped Animal Prevention	MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians
Vegetation clearing resulting in the permanent and temporal loss of suitable upland habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Noise may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Vehicular traffic may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-12: Project Lighting	None Proposed
Increased habitat fragmentation or presence of invasives may cause reduced habitat quality	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Project lighting may decrease suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Avian Species		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-07: Vehicular Conduct APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code	MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures
Destruction of nests and/or roosting sites from vegetation removal may cause injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-07: Vehicular Conduct APM BIO-14: Tree Trimming	MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
	APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code	
Transmission lines pose collision or electrocution risk and may cause injury or mortality	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed
Vegetation clearing resulting in the permanent and temporal loss of suitable habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Vegetation removal may cause loss of prey and subsequent decrease in food resources	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-14: Tree Trimming	None Proposed
Construction noise may disrupt communication and interfere with foraging/breeding activities	APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code APM NOI-01: Restrict Construction Work Periods	None Proposed
Construction lighting may disorient individuals and expose individuals to predation	APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-12: Project Lighting APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code	None Proposed
Introduction of invasive plant species may outcompete native plants, decreasing the quality of suitable foraging and nesting habitat	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-05: Training Program APM BIO-07: Vehicular Conduct APM BIO-13: Invasive Species Prevention	None Proposed
Increased habitat fragmentation and edge effects may cause decreased suitability of habitat	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-07: Vehicular Conduct APM BIO-14: Tree Trimming	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Butterflies		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measure MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures
Construction activities may crush individuals and result in injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measure MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures
Vegetation clearing of suitable habitat and host plants may cause injury or morality	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measure MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Vegetation clearing resulting in the permanent and temporal loss of suitable habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Noise may cause decreased suitability of habitat	APM BIO-05: Training Program	None Proposed
Vehicular traffic may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Project lighting may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Increased habitat fragmentation and edge effects may cause invasion of invasive plants and decreased habitat suitability	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Decrease of nectar resources from vegetation removal may cause subsequent increased competition for food	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Fugitive dust may coat leaves and reduce the quantity of flowers produced by	APM BIO-01: Conduct Biological Surveys	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
individual plants, thereby reducing the quantity and/or quality of nectar from floral resources or the growth of host plants	APM BIO-05: Training Program Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	
Vegetation clearing may cause loss of host plants and consequential limited reproductive potential and population growth	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Crotch's Bumble Bee		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	MM BIO-10. Crotch's Bumble Bee (CBB) Avoidance and Minimization Measures
Construction activities may crush individuals	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-10. Crotch's Bumble Bee (CBB) Avoidance and Minimization Measures
Ground-disturbing or vegetation clearing activities may destroy nest sites and cause injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-10. Crotch's Bumble Bee (CBB) Avoidance and Minimization Measures
Vegetation clearing activities resulting in the permanent and temporal loss of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-10. Crotch's Bumble Bee (CBB) Avoidance and Minimization Measures MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Noise may cause decreased suitability of habitat	APM BIO-05: Training Program	None Proposed
Vehicular traffic may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Project lighting may decrease suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Increased habitat fragmentation and edge effects may allow invasion of invasive plants and decrease suitability of habitat	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Decreased floral resources and increased interaction with non-native honeybees may result in decreased survivorship	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Dust from ground-disturbing activities may coat plant leaves and reduce the quantity of flowers produced	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Bat Species		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Vegetation removal (including trees) that house roosting sites	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-14: Tree Trimming	None Proposed
Removal of transmission poles that house roosting sites	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-05: Training Program	None Proposed
Permanent conversion of roosting and foraging habitat	APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-14: Tree Trimming	None Proposed
Temporary disturbance of roosting and foraging habitat	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM BIO-14: Tree Trimming	None Proposed
Transmission lines pose collision or electrocution risk and may cause injury or mortality	N/A (risk is low due to echolocation abilities and the wingspan of bats is less than the conductor spacing)	None Proposed
Indirect Impacts		
Noise and vibration may cause decreased suitability of habitat	APM BIO-05: Training Program APM NOI-01: Restrict Construction Work Periods	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-07: Vehicular Conduct APM BIO-12: Project Lighting	None Proposed
Project lighting may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Increased habitat fragmentation and edge effects may decrease suitable foraging habitat, increase competition with other bat species, and allow invasive species to invade	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-13: Invasive Species Prevention APM BIO-14: Tree Trimming	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Other Mammal Species		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Burrow or den destruction during excavations may cause injury or mortality	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-16: Special-Status Species Avoidance	None Proposed
Entrapment in excavations may cause injury or mortality	APM BIO-05: Training Program APM BIO-15: Trapped Animal Prevention	None Proposed
Relocation of individuals may result in injury or stress	APM BIO-16: Special-Status Species Avoidance	None Proposed
Permanent loss of suitable habitat	APM BIO-05: Training Program	MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Soil compaction may result in decreased habitat suitability	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Noise may cause decreased suitability of habitat	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM NOI-01: Restrict Construction Work Periods	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
	Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	
Project lighting may decrease suitability of habitat, disrupting breeding and foraging activity and disorienting individuals	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Increased habitat fragmentation and edge effects may result in introduction of invasive plants that may decrease habitat suitability	APM BIO-04: Delineation of Work Areas	None Proposed
Heavy equipment operation may result in disruption of breeding and foraging activities	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Vehicular traffic may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Vegetation removal may result in disruption of breeding and foraging activities	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Ground-disturbing activities may result in disruption of breeding and foraging activities	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Increased habitat fragmentation and edge effects may result in increased competition for food with other mammals	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Reptile Species		
Direct Impacts		
Vehicle strikes may cause injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Destruction of burrows or shelter sites during construction and vegetation clearing or removal may cause injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Entrapment in excavations may cause injury or mortality	APM BIO-05: Training Program APM BIO-15: Trapped Animal Prevention	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Permanent and temporal loss of suitable habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Noise may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM NOI-01: Restrict Construction Work Periods	None Proposed
Vehicular traffic may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
Project lighting may decrease suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Ground-disturbing activities may result in disruption of breeding and foraging activities and exposure to predation	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Vegetation removal may result in exposure to predation due to loss of habitat	APM BIO-02: Develop and Implement a Habitat Restoration Plan	None Proposed
Heavy equipment operation may result in disruption of breeding and foraging activities and exposure to predation	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Increased habitat fragmentation and edge effects may result in decrease of suitable foraging habitat and increased competition for food	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Increased habitat fragmentation and edge effects may result in invasion by invasive species	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-13: Invasive Species Prevention	None Proposed
Southwestern Pond Turtle		
Direct Impacts		
Crushing of individuals from construction activities may result in injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
	APM BIO-07: Vehicular Conduct	
Vehicle strikes may result in injury or mortality	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures
Destruction of nest sites during construction or vegetation clearing	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures
Entrapment in excavations may result in injury or mortality	APM BIO-05: Training Program APM BIO-15: Trapped Animal Prevention	MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures
Permanent loss of suitable upland habitat	APM BIO-04: Delineation of Work Areas	MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Temporary conversion of upland habitat	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas	None Proposed
Indirect Impacts		
Noise may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Vehicular traffic may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct	None Proposed
	APM BIO-04: Delineation of Work Areas	
Project lighting may decrease suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Increased human activity may cause decreased suitability of habitat	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-12: Project Lighting	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Construction activities may result in disruption of breeding or foraging activities	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Construction activities may result in exposure to predation from flushing	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Special-Status Wildlife – Operations and Maintenance		
Direct Impacts		
Less-than-significant impacts	N/A	N/A

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
USFWS-Designated Critical Habitat – Construction, Operations and Maintenance		
Direct Impacts		
Permanent impacts from vegetation removal to critical habitat resulting in the loss of vital physical and biological features	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-14: Tree Trimming	MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measures MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Introduction of invasive plant species may degrade habitat quality	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-13: Invasive Species Prevention	None Proposed
Use of construction equipment may result in the compaction or erosion of soils	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Potential runoff from temporary work areas may affect critical habitat	APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-10: Equipment Placement	None Proposed
Dust on plants may result in reduction of photosynthetic capacity	APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-07: Vehicular Conduct Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Impact BIO-02: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		
Construction		
Direct Impacts		
Temporary loss of habitat from vegetation clearing and ground-disturbing activities	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Permanent loss of habitat from vegetation clearing and ground-disturbing activities	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Increase in ground surface disturbance may result in degraded habitat quality	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Erosion or sedimentation may result from soil compaction, which could bury seedlings and affect plant growth	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Construction may result in fugitive dust that interferes with photosynthesis and plant reproduction	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Grading may impact topsoil that may contain seeds, bulbs, nutrients, and mycorrhizae that species utilize for survival	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan. APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Increased habitat fragmentation and edge effects may result in the introduction of invasive plant species that may increase competition and fire risk	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-13: Invasive Species Prevention	None Proposed
Fuel spills may decrease suitability of habitat	APM BIO-05: Training Program APM BIO-10: Equipment Placement Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Operations and Maintenance		
Direct Impacts		
Less-than-significant impacts	N/A	N/A
Indirect Impacts		
Less-than-significant impacts	N/A	N/A

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Impact BIO-03: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		
Construction		
Direct Impacts		
Unanticipated impacts to aquatic resources may occur in areas not previously surveyed	None Proposed	MM BIO-14. Mitigate for Permanent Impacts to Wetlands and Waters of the U.S. and the State
Indirect Impacts		
Ground-disturbing activities may result in erosion	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-10: Equipment Placement APM HYD-01: Minimize Impacts to Aquatic Features APM HYD-02: Maintain Existing Flow and Drainage Contours APM HYD-03: Jurisdictional Aquatic Resources Field Survey Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Ground-disturbing or vegetation clearing activities may result in the discharge of pollutants into aquatic resources	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-10: Equipment Placement APM HYD-01: Minimize Impacts to Aquatic Features APM HYD-02: Maintain Existing Flow and Drainage Contours APM HYD-03: Jurisdictional Aquatic Resources Field Survey Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Operations and Maintenance		
Direct Impacts		
None anticipated		
Indirect Impacts		
Less-than-significant impacts	N/A	N/A
Impact BIO-04: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		
Construction		
Direct Impacts		
A Project component may block a wildlife movement corridor	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed
Vegetation removal may result in the temporary loss of suitable habitat the supports wildlife in the movement corridor	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
	APM BIO-05: Training Program APM BIO-14: Tree Trimming	
Excavation may adversely change the condition of the wildlife corridor	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring	None Proposed
Installation of transmission lines may result in electrocution and subsequent injury or mortality of birds	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed
Indirect Impacts		
Reduced quality of the wildlife corridor may result from helicopter use	APM BIO-05: Training Program	None Proposed
Noise may cause decreased suitability of habitat	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-05: Training Program APM NOI-01: Restrict Construction Work Periods	None Proposed
Dust may settle on plants and degrade suitable habitat	APM BIO-01: Conduct Biological Surveys APM BIO-05: Training Program Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed
Installation of perches where raptors can prey on wildlife may result in deterrence from using corridor	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed
230 kilovolt (kV) overhead transmission line segment may result in interference with the path of north-south movement during migratory seasons	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed
Operations and Maintenance		
230 kV overhead transmission line segment may increase collision risk and result in injury or mortality	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed
Impact BIO-05: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		
No Impacts		
Impact BIO-06: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		
San Diego County Water Authority Subregional NCCP/HCP		
Direct/Indirect Impacts		
Temporary and permanent impacts to Crestridge Ecological Reserve may impact the Reserve and implementation	APM BIO-02: Develop and Implement a Habitat Restoration Plan	MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities MM BIO-15. Coordination with Preserve or Proposed Preserve Managers

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
of the Crestridge Ecological Reserve Habitat Management and Monitoring Plan		
South County Multiple Species Conservation Program Subarea Plan		
Direct Impacts		
Vehicle strikes may cause injury or mortality to covered species	APM BIO-05: Training Program	None Proposed
Removal of vegetation may occur within suitable habitat during construction	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Permanent conversion of potentially suitable habitat for covered species and temporal loss of habitat	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants) MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Vegetation removal may result in the temporary disturbance of habitat potentially suitable for covered species	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Ground-disturbing activities may result in the temporary disturbance of habitat	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas. APM BIO-05: Training Program	None Proposed
Indirect Impacts		
Lighting may result in decreased suitability of habitat within Preserves or Proposed Reserves, disruption of typical behaviors such as breeding or foraging, or increased risk of predation	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Noise may result in decreased suitability of habitat within Preserves or Proposed Reserves, disruption of typical behaviors such as breeding or foraging, or increased risk of predation	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Increased human activity may result in decreased suitability of habitat within Preserves or Proposed Reserves, disruption of typical behaviors such as breeding or foraging, or increased risk of predation	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Construction activities may result in increased habitat fragmentation and edge effects	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
San Diego Gas & Electric Company Habitat Conservation Plan Amendment – Construction		
Direct/Indirect Impacts		
Impacts to covered species and suitable habitat under the San Diego Gas & Electric Company Habitat Conservation Plan Amendment	APM BIO-02: Develop and Implement a Habitat Restoration Plan	MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants) MM BIO-03. Avoid and Minimize Impacts to Special-Status Amphibians MM BIO-04. Coastal California Gnatcatcher (CAGN) Avoidance and Minimization Measures MM BIO-05. Least Bell's Vireo (LBV) Avoidance and Minimization Measures MM BIO-06. Hermes Copper Butterfly (HCB) Avoidance and Minimization Measures MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat MM BIO-12. Southwestern Pond Turtle Avoidance and Minimization Measures MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
San Diego Gas & Electric Company Habitat Conservation Plan Amendment – Operations and Maintenance		
Direct/Indirect Impacts		
Less-than-significant impacts	N/A	N/A
San Diego Gas & Electric Company Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly – Construction		
Direct/Indirect Impacts		
Impacts to areas under San Diego Gas & Electric Company Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly	APM BIO-02: Develop and Implement a Habitat Restoration Plan	MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat
San Diego Gas & Electric Company Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly – Operations and Maintenance		
Direct/Indirect Impacts		
Impacts to areas under San Diego Gas & Electric Company Low-Effect Habitat	Amendment to the Low-Effect Habitat Conservation Plan for Quino Checkerspot Butterfly or a Project-specific HCP	MM BIO-08. Quino Checkerspot Butterfly (QCB) Avoidance and Minimization Measures MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Conservation Plan for Quino Checkerspot Butterfly		
Southern California National Forests Land Management Plan – Part 2 Cleveland National Forest Strategy – Construction		
Direct Impacts		
Vegetation removal would result in temporary and permanent impacts	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Installation of pole structures would result in temporary and permanent impacts	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Excavation and grading would result in temporary and permanent impacts	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Permanent impacts to suitable habitat for United States Forest Service Sensitive Species	APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas	MM BIO-02. Mitigate for Construction-Related Permanent Impacts to Special-Status Federally and/or State-Listed and/or CRPR 1B or 2B Plant Species (special-status plants) MM BIO-07. Mitigate for Permanent Impacts to Hermes Copper Butterfly Habitat MM BIO-09. Mitigate for Permanent Impacts to Quino Checkerspot Butterfly Habitat MM BIO-11. Mitigate for Permanent Impacts to Crotch's Bumble Bee Habitat MM BIO-13. Mitigate for Impacts to Preserve Land's Upland Native Vegetation Communities
Indirect Impacts		
Noise may cause decreased suitability of habitat	APM BIO-01: Conduct Biological Surveys APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program	None Proposed
Dust from construction activities that may reduce plant and forest productivity	APM BIO-01: Conduct Biological Surveys APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program Comply with air district rules and regulations as described in Section 3.4 Air Quality Comply with water quality rules and regulations as described in Section 3.11 Hydrology and Water Quality	None Proposed

Impact	Applicable Applicant-Proposed Measures (APMs) and Best Management Practices (BMPs)	Applicable Mitigation Measures (MMs)
Introduction and spread of invasive plant species resulting in reduced habitat quality	APM BIO-01: Conduct Biological Surveys APM BIO-02: Develop and Implement a Habitat Restoration Plan APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-13: Invasive Species Prevention	None Proposed
Other construction impacts on species and habitat within the forest	APM BIO-03: Biological Monitoring APM BIO-04: Delineation of Work Areas APM BIO-05: Training Program APM BIO-06: No Harm to Wildlife APM BIO-07: Vehicular Conduct APM BIO-08: Trash Management APM BIO-09: Wildfire Prevention APM BIO-10: Equipment Placement APM BIO-11: Off-Road Hiking APM BIO-12: Project Lighting APM BIO-13: Invasive Species Prevention APM BIO-14: Tree Trimming APM BIO-15: Trapped Animal Prevention APM BIO-16: Special-Status Species Avoidance APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines APM BIO-18: Avoid and Minimize Impacts to Nesting Birds, Special-Status Raptors, Passerines, and Other Birds Protected under the MBTA and California Fish and Game Code	None Proposed
Impact BIO-07: Would the Project create a substantial collision or electrocution risk for birds or bats?		
Overhead transmission structures and poles may result in collision and electrocution, resulting in injury or mortality	APM BIO-17: Prevent Avian Electrocution from SDG&E Project Facilities and Protect Birds on SDG&E Power Lines	None Proposed

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3.6 CULTURAL RESOURCES

This section describes the existing conditions for cultural resources in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.6.1 Environmental Setting

The environmental setting comprises the regional precontact, ethnographic, and historic setting of the study area. Background research and record searches were conducted for the study area, which includes a 1-mile buffer around the Proposed Project components, the proposed alignment and work areas, as well as a one-parcel buffer around the laydown/staging yards. Within the study area, the term "Proposed Project Area" includes a 150-foot-wide area on either side of the proposed alignment centerline and a 30-foot-wide area on either side of the centerline of access roads, the footprint of laydown/staging yards, and the footprints of all work areas to account for direct or indirect impacts to cultural resources. The study area and Proposed Project Area are depicted in Figure 2: Overview Location Map of Attachment 3.6-A: Cultural Resources Technical Report[1].

Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include archaeological resources, historical resources, and "tribal cultural resources" (the latter as defined by Assembly Bill [AB] 52, Statutes of 2014, codified at Public Resources Code [PRC] Section 21074). Archaeological resources are locations where human activity has measurably altered the earth or left deposits of precontact or historic-era physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical, or built environment resources, include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads, districts), or landscapes. Tribal cultural resources are sites, features, places, cultural landscapes, or sacred places and objects with cultural value to a tribe. Tribal cultural resources are analyzed in Section 3.19 Tribal Cultural Resources.

The Proposed Project would cross unincorporated communities within San Diego County, California, including private parcels and open space easements. In addition, the Proposed Project would traverse land managed and/or owned by the County of San Diego (County), United States (U.S.) Forest Service (USFS) (i.e., Cleveland National Forest [CNF]), Sweetwater Authority, Endangered Habitats Conservancy, and California Department of Fish and Wildlife. One proposed staging yard would be located in the city of El Cajon. Construction of the Project is anticipated to include the installation of both overhead and underground transmission line segments and modifications to the existing Suncrest Substation.

[1] The study area is denoted as the "VAA", or visual, auditory, and atmospheric, in the legend. The Proposed Project Area is denoted as the "Proposed Project Area/Physical" and "Proposed Project Area/Physical – Forest Service" in the legend.

The following description of the study area's environmental setting is derived from Attachment 3.6-A: Cultural Resources Technical Report, which was prepared by ASM Affiliates, Inc. (ASM) in March 2026 (ASM 2026).

3.6.1.1 Cultural Setting

3.6.1.1.1 Precontact History

Paleoindian Period (Approximately 10,000 BP – 7,500 BP)

The Paleoindian period in San Diego County marks the transition from the terminal Pleistocene to the early Holocene (Byrd and Raab 2007, Moratto 1984, Warren et al. 1993). In the broader southwestern U.S., this period is often associated with the Clovis tradition, which began around 11,200 Before Present (BP) and is known for its distinctive fluted points (Meltzer 1993). Although no Clovis sites have been found locally, the discovery of isolated fluted points in the area suggests the potential for terminal Pleistocene occupation.

Various terms have been used by archaeologists to classify Paleoindian assemblages in Southern California. Malcolm Rogers, who established a chronological sequence for regional archaeological assemblages, initially proposed and later abandoned terms like Scraper-Maker and Malpais. He introduced the term San Dieguito to refer to the earliest artifact assemblages in San Diego County; the term was drawn from his studies on lithic scatter sites on the San Dieguito plateau. These sites featured distinct scrapers, bifacial knives, and occasional hand stones, suggesting a hunting-focused culture, as they were primarily located on terraces and ridge tops and lacked subsurface materials (Meighan 1954; Moriarty 1966; Rogers 1939, 1945; True 1958, 1966, 1970; Warren 1966, 1967, 1987).

The C. W. Harris site provided the first stratigraphic evidence for placing the San Dieguito within a temporal sequence (Rogers 1938). Located along the San Dieguito River, trench excavations revealed episodes of San Dieguito and Late Precontact occupation. Based on further research, Rogers classified it as a San Dieguito II or III occupation, indicative of a late Paleoindian campsite. The artifact assemblage included flaked lithic tools such as scrapers and projectile points.

Additional fieldwork at the C. W. Harris site from 1958 to 1967 contributed to defining the San Dieguito as a Paleoindian hunting culture (Warren 1966, 1967; Warren and True 1961). Key findings included the absence of ground stone artifacts; the presence of stratigraphic layers beneath a La Jolla occupation; and radiocarbon dates indicating initial occupation at approximately 9,000 BP, ending between 8,500 and 7,600 BP. The lack of ground stone tools was an important distinction between the San Dieguito and subsequent Archaic period cultures, although these tools are now recognized as a minor part of early assemblages (Warren 1967).

Archaic Period (Approximately 8,500 BP – 800 BP)

In the San Diego region, the Archaic period dates from approximately 7,500 BP (potentially as early as 8,500 BP) to between 1,300 and 800 BP. Researchers often segment this period into early, middle, and late phases and distinguish between coastal and inland sites. Coastal Archaic assemblages are prominent in the archaeological record, characterized by numerous ground stone items, flaked cobble tools, and, in some areas, large quantities of marine shells. Despite their

seemingly simple appearance, these assemblages have facilitated more extensive research on human behavior compared to earlier periods.

Coastal sites (which are often referred to as the La Jolla complex) contain shell middens and various stone tools, while inland sites (which are identified as the Pauma complex) do not have shell middens or burials. The Archaic adaptation is thought to differ from the previous San Dieguito adaptation with its emphasis on gathering plant resources, marine mollusks, and occasional fish. Early interpretations suggested that Paleoindian and Archaic occupations represented different populations. However, recent studies have explored potential cultural continuity, considering early Archaic and Paleoindian sites as possibly contemporaneous expressions of a single settlement system.

Rogers identified that shell-midden sites were located near major drainages and lagoons, extending up to 4 miles inland and characterized by large amounts of shellfish and specific tools. He later introduced the concept of "La Jolla culture," distinguishing two phases of continuous occupation based on stratigraphy. The earlier phase featured basic tools and inhumations without grave goods, while the later phase showed more complex artifacts and burial practices.

Later investigations, especially with radiocarbon dating, broadened the understanding of coastal Archaic patterns, revealing archaeological traits and their temporal distributions. The coastal adaptations, particularly at Batiquitos Lagoon, have become a reference point for the area's prehistory. It is widely accepted that coastal exploitation began early in the Holocene and focused on resource-rich bays, with shellfish and plant resources being central to the diet. Significant environmental changes, such as lagoon silting between 4,000 and 3,000 BP, led to a decline in shellfish and other resources, prompting populations to shift inland and intensify their exploitation of terrestrial resources.

Inland Archaic adaptations remain less understood due to a lack of well-dated sites. The prevailing view inaccurately portrays the Archaic as primarily coastal, with key archaeological evidence centered around 25 sites in northern San Diego County known as the Pauma complex. These sites, located on hills overlooking drainages, are characterized by grinding stones and a presumed emphasis on seed gathering, differing from the coastal adaptation that relied more on scraping and hammer tools.

Warren collapsed the inland Pauma and coastal La Jolla Archaic into the Encinitas Tradition, citing a gathering economy across different environments. However, an alternative interpretation suggests that large Archaic sites may have been regularly reoccupied for similar purposes over time, indicating a flexible economy able to exploit diverse resources from both inland and coastal environments.

Late Precontact Period (Approximately 2,000 BP – 1,000 BP)

Between 2,000 and 1,000 BP, a Late Precontact non-ceramic Yuman horizon believed to be ancestral to the Kumeyaay emerged at some La Jolla sites along the Pacific coast. Rogers (1945) first identified this pattern in the Mojave Desert; it is characterized by small triangular arrowheads, shallow metates, unshaped manos, portable mortars, triangular knives, bone awls, and cremation burials. A similar non-ceramic assemblage was found at the Oro Grande site, where radiocarbon dates (1,200-700 BP) placed it within the Saratoga Spring period (1,500-

800 BP) even though no ceramics were discovered. The timing and nature of cultural changes in San Diego County remain unclear, leading to inconsistencies in local cultural histories.

Moriarty (1966) documented changes in artifact assemblages at the Spindrift site in San Diego County during the Late Precontact period. He noted an increased use of exotic cryptocrystalline silicates around 3,000 BP and a shift from inhumation to cremation burials around 2,500 BP. Moriarty proposed that a pre-ceramic Yuman culture, merging with local La Jolla culture, emerged by 2,000 BP. However, the reliability of these dates and the site's stratigraphy are questioned, as many elements of late Archaic assemblages persisted until 1,300 BP. No dates have been established for the introduction of Cottonwood Triangular and Desert Side-notched points that indicate a transition to bow-and-arrow hunting. Non-ceramic assemblages with Cottonwood Triangular points have been found in stratified sites on the San Diego River, but their chronological accuracy is compromised due to poor stratigraphic integrity. These sites showed a shift in obsidian sourcing from the Mojave Desert to Obsidian Butte in the Colorado Desert during the Late Precontact period.

The fully developed Late Precontact period (1,000-300 BP) in San Diego County featured small pressure-flaked projectile points, cremation burials, ceramics, and a focus on inland food collection—particularly acorns. Semi-sedentary villages formed along major waterways, with seasonal occupations in montane areas for acorn and pinyon nut exploitation leading to the establishment of permanent milling stations. Mortars for acorn processing became more common than seed-grinding basins. Coastal villages continued to rely on maritime resources for their diets and lifestyles.

While both Yuman and La Jolla populations exploited similar ecological zones, they practiced slightly different subsistence and settlement strategies, with gathered seed foods being significant in both economies. Advances in food-storage technology, including baskets or ceramic vessels, may have facilitated food surplus acquisition.

3.6.1.1.2 Indigenous Ethnographic and Linguistic Context

The study area is situated within the traditional territory of the Yuman-speaking Diegueño, or Kumeyaay (Ipai-Tipai); this includes the Kumeyaay and Kamia, as well as groups in northern Baja California. The Kumeyaay historically ranged from the coast through the Peninsular Ranges, while the Kamia inhabited the Imperial Valley and the Colorado River. Their animal resources primarily consisted of small game, such as rabbits, hares, woodrats, lizards, snakes, and grasshoppers, as well as larger game like mule deer and possibly pronghorn.

The ethnohistoric Ipai-Tipai/Kumeyaay descendants organized their society into patrilineal groups with hereditary political and ceremonial roles. They established permanent villages in oak woodlands and catchment basins near resource extraction sites. Seasonal movements within communal territories were dictated by resource availability. Kumeyaay culture faced significant changes due to missionization and displacement by Hispanic populations in the late 18th and early 19th centuries, and missionization and Old-World diseases greatly reduced the indigenous population. In the late 1700s, the Kumeyaay population was estimated to number between 3,000 and 9,000 individuals. By 1828, missions documented a population of 1,711 Kumeyaay (Luomala 1978).

By the early 1820s, California was under Mexican rule, which further disrupted indigenous lifestyles with the establishment of ranchos. In 1834, California's missions were secularized, and Native Americans were allocated half of the mission lands. However, they quickly lost these lands due to corrupt administrators, leading many to become serfs or fugitives on their ancestral lands. The U.S. acquired California between 1846 and 1848, and the federal government initially ignored Native American rights, rejecting treaties negotiated in the early 1850s. Euro-American pressures increased as California grew after the Civil War, and these pressures were further exacerbated by diseases like smallpox. The federal census of 1860 recorded 1,571 Kumeyaay residing in 24 villages (Luomala 1978).

Legal reservations were established in eastern San Diego County during the Grant and Hayes administrations, including Capitan Grande (1875), Campo (1893), La Posta (1893), and others. However, these reservations were insufficient to support traditional or mixed economies, leading to dire conditions for the Ipai-Tipai by the 1880s. Overgrazing and water diversion devastated their resources, prompting a recommendation for the removal of white squatters from reservations in 1883 that ultimately led to little action. By the 1890s, many Native Americans worked in ranches, mines, or towns and returned to reservations for community events.

Kumeyaay ancestry has deep ties in what is now San Diego County and northern Baja California, extending thousands of years, as acknowledged in State Assembly Joint Resolution No. 60. Archaeological findings since the 1920s and early accounts have documented their pre-contact culture, but the most authentic insights come from the Kumeyaay's own oral traditions, including stories and songs passed down through generations. Ethnographic studies reveal a rich vocabulary for describing landforms, highlighting their deep connection to nature (DeCarlo et al. 2020).

Into the 21st century, local Native Americans have preserved elements of their traditional culture while also engaging with the wider community. Recent themes in reservation communities focus on struggles for tribal sovereignty, social justice, economic independence, and the balance between traditional values and modernity, with the development of Native American casinos revitalizing some groups.

According to the Bureau of Indian Affairs, 1,322 Kumeyaay were reported in 1968, of whom 435 lived on reservations (Luomala 1978). By 1990, it was estimated that approximately 1,200 Kumeyaay resided on reservation lands, while approximately 2,000 Kumeyaay lived in other locations. Today, the Kumeyaay Indian Nation is comprised of 12 federally recognized tribes with additional members and groups not currently designated as federal tribes.

A detailed discussion of the Kumeyaay Indian Nation, tribal resources in the vicinity of the Proposed Project, and the outreach to tribes to date is presented in Chapter 3.19 Tribal Cultural Resources.

3.6.1.1.3 History

Euro-American Setting

European contact with coastal southern California began in 1542 with the expedition of Juan Rodríguez Cabrillo, but interactions with interior regions did not occur until after the

establishment of the Spanish presidio and mission in San Diego in 1769. During this period, exploratory efforts by figures such as Pedro Fagés began, and the Southern Immigrant Trail was used by colonists traveling from Sonora, marking the onset of mission culture's influence on indigenous communities within the study area.

After Mexico gained independence from Spain in 1821, the focus shifted away from the Franciscan mission system, promoting Hispanic settlement and opening new avenues for foreign trade. The number of private land grants increased, extending further inland from the coast.

During the Mexican-American War (1846-1848), California was occupied and annexed by the U.S. through the Treaty of Guadalupe-Hidalgo in February 1848. This treaty required the U.S. to recognize legitimate land claims in Alta California. Initially, Mexicans formed the majority of the population, but the Gold Rush spurred large-scale immigration after 1849. Settlers began to squat on land owned by Mexicans, invoking preemption rights to claim unoccupied land before auction. By 1860, most Californios had lost their original land holdings.

By 1860, much of San Diego was unimproved farmland, including ranches. Homesteading was facilitated by the Homestead Act of 1862, which offered 160 acres to settlers for a nominal fee after 5 years of cultivation and residency. The Timber Culture Act of 1873 also allowed land acquisition through tree cultivation. Many small farming communities sprang up in San Diego County during the 1870s and 1880s as settlers claimed government land or purchased small holdings.

The completion of the transcontinental railroad in November 1885 led to a real estate boom in San Diego that attracted settlers through promotions highlighting the region's favorable climate and potential profitability. The city's population soared from 5,000 in 1885 to 40,000 in 1889, with growth continuing to nearly 2 million by 2000; this growth was mainly concentrated in coastal and adjacent inland areas.

Throughout the 20th century, various themes shaped the history of the study area and surrounding region. Improved road and rail transportation linked urban San Diego with eastern regions. Development for farming and grazing in the inland valleys was limited, while mining in the Peninsular Ranges varied in scale and economic significance. Substantial areas were designated for resource protection and recreational use, including portions of CNF and Cuyamaca Rancho State Park, with large tracts in the Peninsular Ranges receiving wilderness designations (ASM 2026).

Alpine

The community of Alpine is situated on a relatively flat plateau within the Cuyamaca Mountains and is characterized by a mild climate conducive to agriculture. Early Euro-American settlement of the land began in 1848 when the land was sold to Don Jose Antonio Aguirre. From 1854 to 1860, a semi-weekly horseback mail route, referred to as "The Jackass Mail Trail," ran through the land, transporting mail from San Diego to Yuma. This route is considered the first regular U.S. Mail route in southern California. After the end of the mail route, Alpine remained a popular stop for travelers going to or from Arizona.

John S. Harbison was one of the first settlers in Alpine and is credited with pioneering commercial beekeeping in San Diego County. Honey became a leading agricultural product of Alpine and remained the community's primary crop until the 1970s. Other agricultural specialties included olives, stone fruits, avocados, and citrus, as many of the people who settled in the region between the 1870s to the 1950s were farmers and ranchers.

Alpine became a popular resort destination as it was known for its ideal climate and scenic landscape. Japatul and Dehesa Valley were specifically recognized for their beauty and scenic drives. Aside from farmers, there were not many permanent residents in Alpine until the late twentieth century. The construction of water facilities in the early 1960s, which provided public access to water in the area, combined with the completion of Interstate 8 in 1969, led to the community's growth during the 1970s. Alpine's population increased from approximately 5,000 people in 1970 to 17,000 by 2006. Despite this period of late-twentieth-century growth, Alpine remains a relatively rural and agricultural community with a present-day population of about 14,500 people (ASM 2026).

El Cajon

El Cajon Valley was founded by priests from the Mission San Diego de Alcala in the early nineteenth century. The foothills and lush grasslands of El Cajon Valley made the area an ideal location for raising cattle.

Following Mexico's 1821 independence from Spain and its claim over the regions that include present-day California and Texas, the Mexican government distributed many land grants in California to influential Mexican families. In 1845, Dona Maria Antonio Estudillo was granted 48,799 acres of land in El Cajon Valley, including the present-day communities of El Cajon, Glenview, Johnstown, Lakeside, Santee, and part of Grossmont. The land was used for cattle-raising operations that supplied shoemakers. Following the deaths of Dona Maria Antonio Estudillo and her husband, the U.S. Land Commission issued a land patent to their heirs in 1876, thereby formally establishing Rancho El Cajon.

In subsequent years, portions of Rancho El Cajon were sold to various people, resulting in the subdivision of the rancho into smaller settlements. In 1868, Isaac Lankershim, a San Francisco financer, purchased a substantial portion of the land, part of which would later form the city of El Cajon, and established agricultural operations on the property. Within a few years, the valley gained recognition for its agricultural productivity, especially in cattle, citrus, avocados, grapes, and wheat.

By the nineteenth century, distinct communities had been established in the area. El Cajon had a main street with sprawling farmland surrounding it and a steadily rising population. The city of El Cajon was incorporated into San Diego County in 1912. El Cajon's primary industry remained agricultural production until the end of World War II, which brought an influx of people to the area, transforming the town from a rural community into the largest city in eastern San Diego County. El Cajon experienced an industrial boom in the 1970s, resulting in the construction of more homes and industrial parks. Toward the end of the twentieth century, the city's growth began to stabilize and today El Cajon is recognized as a highly populated, industrialized city that serves as the center for East County San Diego (ASM 2026).

Crest

The unincorporated community of Crest is located in eastern San Diego County, atop a ridge just beyond the eastern city limits of El Cajon. The community sits at an elevation of about 1,500 to 1,800 feet. Crest was originally two separate communities, La Cresta and Suncrest, but the two merged in the early 1960s to accommodate a single post office serving the area, adopting the unified name 'Crest.'

The communities of Suncrest and La Cresta were marketed in the 1920s as ideal mountain getaway spots, and the first subdivision on the ridge was plotted in 1924 for the development of vacation cabins. During this period, the *San Diego Sun Newspaper* offered a promotion through which subscribers could purchase land lots in Suncrest for 35 dollars. The influx of vacationers ultimately led to the development of roads, cabins, a clubhouse, and a golf course in the area. By the late 1920s, road improvements resulted in increased access to the area and more routes for scenic drives. Although the cabins brought vacationers to the area throughout the 1920s and 1930s, residents did not permanently move into the area until about 1950.

The area that is present-day Crest was recognized for its natural beauty and its potential health benefits. In 1947, the U.S Department of the Interior published a list of places in the U.S. with satisfactory living conditions for people with asthma, and the Crest Community Twin District—along with the nearby communities of El Cajon, Wintergardens, and Alpine—was included. National recognition of the area's potential climate-related health benefits, improved access to water through expanded infrastructure, and the establishment of a local school all contributed to increased development during the 1950s.

Crest remains a small community with a population of 2,828 as of 2020 (U.S. Census 2020). While the region suffers from periodic wildfires, which have destroyed many of the early buildings and features of the town, it retains much of its natural landscape and impressive views (ASM 2026).

3.6.1.2 Cultural Resources Survey Methods

3.6.1.2.1 Records Search and Historical Research

A records search was completed for the Proposed Project study area to identify the presence of previously recorded cultural resources. A cultural resources records and literature search of documents and maps on file at the California Historical Resources Information System (CHRIS) through the South Coastal Information Center (SCIC) was obtained by SDG&E and provided to ASM on December 20, 2024, and August 19, 2025 to facilitate the evaluation of cultural resources. In addition, ASM submitted a records search request to the CNF Heritage Program Rancho Bernardo Office and received the results of the records search on June 5, 2025. ASM also conducted an in-person records search with the CNF Heritage Program Manager on June 9, 2025 to review undigitized documents and reports.

Further research of primary and secondary archival materials was conducted at San Diego State University, El Cajon Public Library, online newspaper databases, and Ancestry.com. Historic maps and aerial photographs were inspected via HistoricAerials.com to further understand the development of the study area. ASM contacted the City of El Cajon and the County Planning Department to obtain building permits; however, the City of El Cajon does not retain building

permits for parcels in the study area, and the County does not retain building permits prior to 1979. ASM was unable to request original building records from the San Diego County Assessor due to the requirement for owner consent to obtain those records.

3.6.1.2.2 Pedestrian Surveys

Intensive archaeological and architectural pedestrian surveys of the Proposed Project Area were conducted between April 14 and June 20, 2025, as well as on July 23 and October 3, 2025, under the direction of ASM. The pedestrian survey efforts covered approximately 482 acres of the 627 acres that constitute the Proposed Project Area. Approximately 146 acres of the Proposed Project Area have not yet been surveyed due to lack of access on private property or terrain (e.g., dense vegetation, steep slopes). The areas that have been surveyed are depicted in Appendix B of Attachment 3.6-A: Cultural Resources Technical Report. The archaeological and architectural pedestrian surveys were conducted in accordance with the Secretary of the Interior's Standards and Guidelines for Identification and Evaluation for Local Surveys (Derry et al. 1985), Identification and Inventory Needs (USFS 2013), and Forest Service Manual (FSM) 2360 (USFS 2008). Andrew Miller, MA, Program Manager and Principal Archaeologist, and Rachel Ruston, Director, served as project managers. Terrence Luévano, MA, served as the Principal Investigator directing the archaeological field surveys. All ASM technical staff meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology (36 Code of Federal Regulations [CFR] 61).

As part of the pedestrian surveys, on July 23, 2025, a historic built environment survey of the study area was conducted to identify historically significant architectural structures and potential visual, auditory, and atmospheric (VAA) impacts of the Proposed Project upon such structures. The survey was conducted from public vantage points and public rights-of-way wherever possible. If surveyed resources were not visible or accessible, ASM completed supplemental research to record and evaluate the resources, such as reviewing current mapping software, historic maps, aerials, historic newspaper databases, County directories, and other sources. Shannon Davis, MA, RPH, Director of Architectural History and History, directed the Architectural History team and assisted with project management. ASM Architectural Historians Emily Steele, MA, and Madeline Gonzalez, MA, supported Ms. Davis as project historians, conducted historic research, survey, and evaluation for the built environment resources.

ASM used Global Positioning System with submeter-accurate horizontal accuracy, along with Geographic Information System (GIS) files, to support the pedestrian surveys, identify the locations of previously recorded cultural resources (i.e., precontact and historic-era sites and isolates) within the Proposed Project Area, and document any newly identified cultural resources. A site is defined as any concentration of three or more artifacts in a 25 square-meter area. Separate sites were recorded when artifact concentrations were separated by more than 50 meters. Isolated artifacts are defined as fewer than three artifacts in a 25 square-meter area. Newly identified cultural resources were assigned a temporary site number by ASM in the field. Additionally, ASM archaeologists took digital photographs of each resource.

Following the surveys, ASM prepared a Cultural Resources Technical Report (CRTR), included as Attachment 3.6-A: Cultural Resources Technical Report, to document the results and methods of the records search and pedestrian surveys. Confidential appendices attached to the CRTR will

be submitted separately to California Public Utilities Commission (CPUC) staff in accordance with Public Utilities Code Section D.21.09.020 and General Order 66-D.

3.6.1.2.3 Native American Coordination

Native American coordination is discussed in Section 3.19 Tribal Cultural Resources.

3.6.1.3 Records Search, Historical Research, and Survey Results

The record searches and pedestrian surveys identified 37 cultural resources, including archaeological sites and historic built environment resources (i.e., 23 resources in the Proposed Project Area and 14 resources outside of the Proposed Project Area but within the study area). Cultural resources in the study area include 11 archaeological sites, five isolated artifacts, and 21 historic built environment resources.

The 11 archaeological sites are listed in Table 3.6-1: Archaeological Sites Identified in the Study Area and the five isolated artifacts are listed in Table 3.6-2: Isolated Finds Identified in the Study Area. Of the 11 archaeological sites identified, six sites were identified from the records search and five new sites were identified during field surveys. The five isolated artifacts were also identified during the field surveys. Six of the archaeological sites are precontact-era, four are historic-era sites, and one is both a precontact and a historic (multicomponent) site.

Table 3.6-1: Archaeological Sites Identified in the Study Area

Resource Number/Name	Temporal Description	NRHP*/CRHR*/County RPO* Status	Previously Identified?
P-37-012106/37-012107 CA-SDI-12106/12107	Multicomponent	Unevaluated	Yes
P-37-012108 / CA-SDI-12108	Precontact	Unevaluated	Yes
P-37-012109 / CA-SDI-12109	Precontact	Unevaluated	Yes
P-37-012110 / CA-SDI-12110	Precontact	Unevaluated	Yes
P-37-005614 / CA-SDI-5614	Historic	Unevaluated	Yes
P-37-031212 / FS#05025401574	Historic	Unevaluated	Yes
SX-SCR-S-1	Precontact	Unevaluated	No
SX-SCR-S-3	Historic	Unevaluated	No
SX-SCR-S-4	Precontact	Unevaluated	No
SX-SCR-S-5H	Historic	Unevaluated	No
SX-SCR-S-13	Precontact	Unevaluated	No

Source: ASM 2026
* NRHP = National Register of Historic Places
* CRHR = California Register of Historical Resources
* County RPO = County Resource Protection Ordinance

Table 3.6-2: Isolated Finds Identified in the Study Area

Resource Number/Name	Temporal Description	NRHP/CRHR/County RPO Status	Previously Identified?
SX-SCR-ADS-A1	Precontact Isolate	Not eligible	No
SX-SCR-ISO-5	Precontact Isolate	Not eligible	No
SX-SCR-LT-H1	Historic Isolate	Not eligible	No
SX-SCR-LT-H2	Historic Isolate	Not eligible	No
SX-SCR-LT-H3	Historic Isolate	Not eligible	No

Source: ASM 2026

The 21 built environment resources are listed in Table 3.6-3: Historic Built Environment Resources Identified in the Study Area. Seventeen of these resources were newly identified in the built environment survey. Background research revealed that an additional four previously recorded historic architectural resources are in the study area; these four resources were previously determined eligible for CRHR listing.

3.6.2 Regulatory Setting

3.6.2.1 Federal

3.6.2.1.1 National Historic Preservation Act

Authorized by the National Historic Preservation Act (NHPA) and administered by the National Park Service (NPS), the National Register of Historic Places (NRHP) is the official list of the nation's historic places deemed worthy of preservation. It includes districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture.

To be eligible for listing in the NRHP, a property must retain sufficient integrity to convey its significance and meet at least one of the following evaluation criteria:

- It is associated with events that have made a significant contribution to the broad patterns of our history.
- It is associated with the lives of significant persons in our past.
- It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may be likely to yield, information important in history or prehistory.

Should a cultural resource be determined eligible for NRHP listing, it is considered a "historic property" under Title 36, Section 60.4 of the CFR.

Table 3.6-3: Historic Built Environment Resources Identified in the Study Area

Cultural Resource Number and/or Name	Brief Description	NRHP/CRHR/County RPO Eligibility	Location in the Study Area
Newly Recorded Architectural Resources			
19785 Japatul Road	Single-family house constructed in 1970 (not accessible during field survey)	Treat as eligible under NRHP/CRHR/RPO criteria C/3/3 and avoid	Within study area
19509 Japatul Road	Single-story rectangular house with board and batten wood siding built in 1971	Recommended not eligible	Within study area
19515 Japatul Road	Single-family rectangular house built in 1973	Treat as eligible under NRHP/CRHR/RPO criteria C/3/3 and avoid	Within Proposed Project Area
1356 Real Way Lane	Single-story rectangular Spanish Colonial Revival-style house built in 1935	Recommended not eligible	Within study area
7701 Dehesa Road	Single-family residence constructed in 1945 (not accessible during field survey)	Treat as eligible under NRHP/CRHR/RPO criteria C/3/3 and avoid	Within study area
518 Mountain View Road	Single-story house with rough stucco and stone siding built in 1976	Recommended not eligible	Within study area
122 Mountain View Road	Single-story rectangular house with smooth stucco and brick siding built in 1953	Recommended not eligible	Within Proposed Project Area
1090 La Cresta Boulevard	Two-story rectangular plan building with smooth stucco siding 1954	Recommended not eligible	Within study area
1093 La Cresta Boulevard	Single-story rectangular plan building with horizontal wood-panel siding built in 1952	Recommended not eligible	Within study area
115 La Cresta Road	Single-story rectangular plan building with horizontal wood-panel siding built in 1935	Recommended not eligible	Within Proposed Project Area
128 La Cresta Road	Single-story, L-shaped building constructed from concrete masonry blocks built in 1952	Recommended not eligible	Within Proposed Project Area
141 Sage Road	Single-story rectangular building with horizontal wood siding built in 1976	Recommended not eligible	Within study area

Cultural Resource Number and/or Name	Brief Description	NRHP/CRHR/County RPO Eligibility	Location in the Study Area
235 La Cresta Road	Single-story rectangular building with rough stucco siding built in 1955	Recommended not eligible	Within Proposed Project Area
248 La Cresta Road	Single-story rectangular building with vertical panel wood siding built in 1978	Recommended not eligible	Within Proposed Project Area
367 La Cresta Road	Single-story L-shaped building with horizontal wood panel siding built in 1975	Recommended not eligible	Within study area
2934 La Cresta Road	Single-story rectangular building with horizontal panel vinyl siding built in 1979	Recommended not eligible	Within study area
4980 La Cresta Road	Single-story rectangular plan building with smooth stucco siding built in 1963	Recommended not eligible	Within study area
Previously Recorded Historic Architectural Resources			
P-37-017705 (Peterson House, 1998 Valley Rim Road)	One-story shingle-style house constructed in 1914	Previously determined eligible for CRHR*	Within study area
P-37-017715 (O.B. Wetzell Residence, a.k.a. the Lois Strong Home, 2049 Vista Valley Rim Place)	Constructed in 1985	Previously determined eligible for CRHR*	Within study area
6228 Dehessa	Identified as architecturally significant, but no Department of Parks and Recreation site record is on file at the SCIC.	Previously determined eligible for CRHR*	Within study area
P-37-017637 (The Snyder House 204 West Park Boulevard)	One-story bungalow constructed in 1922	Previously determined eligible for CRHR*	Within study area

Source: ASM 2026
*Previous evaluation was not available

National Register Bulletin 15

The NPS publication, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a historic property and defines integrity as "the ability of a property to convey its significance" (NPS 1997). The evaluation of integrity must be grounded in an understanding of a historic property's physical features and how they relate to the aspects of integrity. Determining which of these aspects are most important to a property requires knowing why and at what level (i.e., local, state, or national) it is significant and its period of significance. Although "rarity" of property type is not an aspect of significance, it is considered when assessing integrity.

To retain historic integrity, a property must possess several aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. These seven aspects of integrity are defined as follows:

- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or man-made, including vegetation, paths, fences, and relationships between other features or open space.
- Materials are the physical elements that were combined or deposited during a particular period or time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property as a whole or to individual components.
- Feeling is a property's expression of the aesthetic or historic sense of a particular period. It results from the presence of physical features that, when taken together, convey the property's historic character.
- Association is the direct link between the important historic event or person and a historic property.

3.6.2.1.2 Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) of 1979 provides for the protection of archaeological resources more than 100 years old that occur on federally owned or controlled lands. The statute makes it unlawful to excavate and/or remove items of archaeological interest from federal lands without a permit, and it defines the process for obtaining such a permit from the responsible federal agency. This process includes a 30-day notification to interested persons,

including Native American tribes, by the agency to receive comments regarding the intended issuing of a permit. The law establishes a process for prosecuting people who illegally remove archaeological materials from lands subject to ARPA. The law also provides for curation of archaeological artifacts, ecofacts, notes, records, photographs, and other items associated with collections made on federal lands. Standards for curation are provided for in Title 36, Part 79 of the CFR.

3.6.2.1.3 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (25 United States Code Sections 3001–3013) requires federal agencies and institutions that receive federal funds (including museums, universities, state agencies, and local governments) to repatriate or transfer Native American human remains and other cultural items to the appropriate parties through the following methods:

- consulting with lineal descendants, Native American tribes, and Native Hawaiian organizations (NHOs) on Native American human remains and other cultural items;
- protecting and planning for Native American human remains and other cultural items that may be removed from federal or tribal lands;
- identifying and reporting all Native American human remains and other cultural items in inventories and summaries of holdings or collections; and
- giving notice prior to repatriating or transferring human remains and other cultural items.

NAGPRA recognizes the rights of lineal descendants, Native American tribes, and NHOs in Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. The Secretary of the Interior is responsible for promulgating regulations to carry out the provisions of NAGPRA and delegated this authority to the Assistant Secretary. Since 1993, the Department of the Interior has published rules under the title "Native American Graves Protection and Repatriation Act Regulations," including the following:

- RIN 1024-AC07, 1993 Proposed Rule (58 Federal Register [FR] 31122, May 28, 1993) and 1995 Final Rule (60 FR 62134, December 4, 1995);

- RIN 1024-AC84, Civil Penalties Final Rule (68 FR 16354, April 3, 2003) and Future Applicability Final Rule (72 FR 13184, March 21, 2007);

- RIN 1024-AD68, 2007 Proposed Rule Disposition of Culturally Unidentifiable Human Remains (72 FR 58582, October 16, 2007) and 2010 Final Rule Disposition of Culturally Unidentifiable Human Remains (75 FR 12378, March 15, 2010);

- RIN 1024-AE00, Disposition of Unclaimed Cultural Items Final Rule (80 FR 68465, November 5, 2015); and

- RIN 1024-AE19. to clarify and improve upon the systematic processes for disposition or repatriation of Native American human remains and cultural items (87 FR 63202, October 18, 2022).

RIN 1024-AE19 revises and replaces definitions and procedures under NAGPRA for lineal descendants, Native American tribes, NHOs, museums, and federal agencies, including other federally funded institutions in control of collections. The regulation establishes systematic procedures for inventorying or summarizing collections of Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony; determining cultural affiliation; consulting with affiliated tribes, descendants, and NHOs; publishing notices of inventory or summary completion; and, where appropriate, disposition or repatriation of identified remains or items. The rule sets specific timelines and assigns responsibilities to museums, federal agencies, and other covered institutions for completing inventories, summaries, and notices. When repatriation or disposition is requested, the regulation requires deference to the traditional knowledge of lineal descendants, Native American tribes, and NHOs. This rule went into effect on January 12, 2024.

3.6.2.1.4 Region 5 Programmatic Agreement

The *Programmatic Agreement Among The U.S.D.A. Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer, And The Advisory Council On Historic Preservation Regarding The Processes For Compliance With Section 106 Of The National Historic Preservation Act For Management Of Historic Properties By The National Forests Of The Pacific Southwest Region* is an agreement that aims to manage resources on USFS system lands within the USFS Pacific Southwest Region (Region 5). Stipulations in the programmatic agreement (PA) outline that the USFS would ensure that specific measures are carried out, including utilizing historic preservation professionals to implement the agreement, maintaining a site location and survey location record system, and involving tribes and the public in the identification and evaluation of properties. USFS project leaders are responsible for contacting specialists during the planning of an undertaking to determine if it qualifies as an "undertaking" pursuant to the definition provided in Section 301(7) of the NHPA and 36 CFR 800.2(o) under the NHPA and the National Environmental Policy Act. The agreement outlines streamlined procedures for reviewing undertakings with little or no potential to affect historic properties. The PA provides a comprehensive framework for managing routine undertakings in the region while ensuring compliance with historic preservation laws and involving relevant stakeholders in the process.

3.6.2.1.5 United States Forest Service Manual 2300

The USFS Manual 2300 – Recreation, Wilderness, and Related Resource Management Chapter 2360 - Heritage Program Management Heritage Program Manual (FSM 2360) establishes the framework for managing cultural and historic resources within USFS Region 5. The manual outlines the responsibilities of agency personnel, including Heritage Program managers and staff, in planning, inventory, evaluation, protection, and enhancement of historic properties. The manual emphasizes compliance with federal laws (e.g., NHPA) and sets standards for professional qualifications, documentation, and consultation with State Historic Preservation Officers, Native American tribes, and other stakeholders. It provides guidance for integrating heritage resource management into broader land management activities, ensuring that historic properties are identified, evaluated, and protected during project planning and implementation. The manual also details procedures for training, certification, records management, and ongoing professional development to maintain high standards in heritage stewardship across Region 5 forests.

3.6.2.2 State

3.6.2.2.1 California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are also listed in the CRHR. The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a statewide program with a scope and criteria for inclusion that are similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR. California Historical Landmarks (i.e., buildings, structures, sites, or places that have been determined to have statewide historical significance) are also automatically listed in the CRHR. Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission (SHRC) are also listed in the CRHR. California Points of Historical Interest are sites, buildings, features, or events that are of local (i.e., city or county) significance.

A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in Title 15 California Code of Regulations (Cal. Code Regs.) Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the CRHR criteria is considered a significant historical resource under CEQA. The CRHR uses the following four evaluation criteria, asking if the project:

- is associated with events that have made a significant contribution to the broad patterns of local or regional history, or to the cultural heritage of California or the U.S.;
- is associated with the lives of persons important to local, California, or national history;
- embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values; or
- has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Similar to the NRHP, a historical resource must meet one of these criteria and retain integrity to be listed in the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP.

3.6.2.2.2 California Environmental Quality Act

CEQA requires that lead agencies thoroughly assess the potential impacts of proposed projects upon cultural resources. The assessment must evaluate potential direct and indirect effects associated with impacts to cultural resources.

The California Public Resources Code (PRC) Section 5097.94 was amended with the introduction of AB 52 in 2014, which introduced the following new sections:

- Section 21073: defines a "California Native American tribe" as a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission (NAHC) for the purposes of Chapter 905 of the Statutes of 2004 (SB 18);

- Section 21074: definition of "tribal cultural resources" as it relates to CEQA;

- Section 21080.3.1: addresses the requirements for lead agencies to consult with Native American tribes during the environmental review process;

- Section 21080.3.2: California Public Resources Code Section 21080.3.2 establishes provisions for lead agencies regarding the consultation process with Native American tribes concerning proposed projects;

- Section 21082.3, provides guidelines regarding the consideration of tribal cultural resources in the environmental review process;

- Section 21083.09: addresses the protection of tribal cultural resources during the environmental review process;

- Section 21084.2: provides guidelines regarding the identification and consideration of cultural resources in the environmental review process; and

- Section 21084.3: establishes the criteria for determining whether a project has a significant impact on the environment with respect to cultural resources and tribal cultural resources.

The introduction of AB 52 was to ensure the early involvement of California Native American tribes in the environmental review process and to establish a new category of resources requiring consideration under CEQA—known as Tribal Cultural Resources. According to PRC Section 21074(a)(1) and (2), TCRs encompass sites, features, places, cultural landscapes, sacred places, and objects that hold cultural significance to California Native American tribes. These resources may either be listed or deemed eligible for listing in the California Register of Historical Resources, included in a local historical resource register, or identified as TCRs by the lead agency based on substantial evidence.

PRC Section 21080.3.1 stipulates that within 14 days of a lead agency determining that a project application is complete, or upon a public agency's decision to undertake a project, the agency must formally notify designated contacts or tribal representatives of California Native American tribes that have traditional and cultural affiliations within the Proposed Project vicinity (as defined in PRC Section 21073) and have requested written notification (PRC Section 21080.3.1[b]). Tribes interested in engaging in consultation are required to respond in writing within 30 days of receiving the lead agency's notification. The agency must initiate consultation within 30 days of receiving such a request from the tribe (PRC Sections 21080.3.1[d] and 21080.3.1[e]).

The following is a list of potential consultation discussion topics addressed by PRC Section 21080.3.2(a):

- the type of environmental review necessary,
- the significance of tribal cultural resources,
- the significance of a project's impacts on tribal cultural resources,
- project alternatives or appropriate measures for preservation, and
- mitigation measures.

Consultation is considered concluded when either of the following occurs:

- (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2[b]).

In accordance with PRC Section 21080.3.1, if a California Native American tribe has requested consultation but has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with PRC Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an Environmental Impact Report or adopt a Mitigated Negative Declaration (PRC Section 21082.3[d][2] and [3]).

PRC Section 21082.3(c)(1) states that any information, including the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process must not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information must be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

If the lead agency determines that a project may cause a substantial adverse change to a TCR, and measures are not otherwise identified in the consultation process, provisions under PRC Section 21084.3(b) describe mitigation measures that may avoid or minimize the significant adverse impacts. Examples include the following:

- Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

- Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

  - protecting the cultural character and integrity of the resource,
  - protecting the traditional use of the resource, and
  - protecting the confidentiality of the resource.

- Permanent open space easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

- Protecting the resource.

Several provisions of the PRC also govern archaeological finds of human remains and associated objects. Procedures are detailed under PRC Section 5097.98 through 5097.996 for actions to be taken whenever Native American remains are discovered. Furthermore, Section 7050.5 of the HSC states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in PRC Section 5097.99.

Any person removing human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC Section 7100 has committed a public offense that is punishable by imprisonment. PRC Chapter 1.7, Sections 5097.5 and 5097.9 define any unauthorized disturbance or removal of a fossil site or remains on public land as a misdemeanor. Specifically, a person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or precontact ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

3.6.2.2.3 Public Resources Code Section 21083.2

CEQA also applies to effects on archaeological sites that do not meet the criteria for historical resources but do meet the definition of a "unique archaeological resource" (PRC Section 21083.29[g]). A unique archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- it contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
- it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- it is directly associated with a scientifically recognized important precontact or historic event or person.

3.6.2.2.4 California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (PRC Section 5097.9) applies to both state and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are those of a Native American, the coroner must notify the NAHC, which notifies and has the authority to designate the Most Likely Descendant (MLD) of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

PRC Section 5097 specifies the procedures to be followed if cultural resources—and, in particular, human remains—are unexpectedly discovered on nonfederal public land. Section 5097.5 of the PRC states:

> "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor."

3.6.2.2.5 California Native American Graves Protection and Repatriation Act

Enacted in 2001 and amended in 2020, the California Native American Graves Protection and Repatriation Act (CalNAGPRA) establishes a state-level framework for the respectful treatment, inventory, and repatriation of California Native American human remains and cultural items held by state-funded agencies and museums (California Health and Safety Code Section 8010-8030). CalNAGPRA complements the federal NAGPRA by extending repatriation rights to non-federally recognized California Indian tribes and emphasizing culturally appropriate consultation. CalNAGPRA mandates timely responses to repatriation claims, encourages voluntary returns by private institutions, and empowers the NAHC to oversee dispute resolution and compliance. CalNAGPRA reflects California's commitment to tribal sovereignty, cultural preservation, and restorative justice.

3.6.2.3 Local

3.6.2.3.1 County of San Diego

County of San Diego Local Register of Historic Resources

The criteria for listing historical resources to the Local Register (San Diego County Code of Regulatory Ordinances [County Ordinance], Ordinance No. 9493) are consistent with those developed by the Office of Historic Preservation for listing resources to the CRHR, but they have been modified for local use in order to include a range of historical resources that specifically reflect the history and prehistory of San Diego County. Only resources that meet the following criteria may be listed or formally determined eligible for listing to the Local Register:

- are associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
- are associated with the lives of persons important to the history of San Diego County or its communities;
- embody the distinctive characteristics of a type, period, San Diego region, or method of construction, or represents the work of an important creative individual, or possess high artistic values; or
- have yielded, or may be likely to yield, information important in prehistory or history,

County of San Diego Resource Protection Ordinance

The Resource Protection Ordinance, County Ordinance 86.601, *et. seq*. (RPO), when applicable, generally requires that cultural resources be evaluated as part of the County's discretionary environmental review process for certain permit types. If cultural resources are found to be significant pursuant to the RPO, they must be preserved. Where applicable, the RPO prohibits development, trenching, grading, clearing, and grubbing, or any other activity or use that damages significant precontact or historic site lands (except for scientific investigations with an approved research design prepared by an archaeologist certified by the Register of Professional Archaeologists).

Pursuant to the RPO, significant precontact or historic sites are sites that provide information regarding important scientific research questions about precontact or historic activities that have scientific, religious, or other ethnic value of local, regional, state, or federal importance. Such locations include, but are not limited to, the following:

- a significant precontact or historic district, site, interrelated collection of features or artifacts, building, structure or object that meets one of the following criteria:

  - formally determined eligible or listed in the NRHP by the Keeper of the National Register; or
  - to which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or
  - one-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and/or

- any location of past or current sacred religious or ceremonial observances that meets one of the following criteria:

  - protected under Public Law 95-341, the American Religious Freedom Act, or Public Resources Code Section 5097.9 (e.g., burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, or religious ground figures); or

  - other formally designated and recognized sites with ritual, ceremonial, or sacred value to any precontact or historic ethnic group.

San Diego County General Plan

The primary focus of the General Plan's Conservation and Open Space Element is to provide direction to future growth and development in San Diego County with respect to the conservation, management, and utilization of natural and cultural resources; the protection and preservation of open space; and the provision of park and recreation resources.

The following verbatim goals and policies that are relevant to cultural resources and the Proposed Project are derived from the Conservation and Open Space Element of the County's General Plan (County of San Diego 2011):

- **Goal COS-7: Protection and Preservation of Archaeological Resources.** Protection and preservation of the County's important archeological resources for their cultural importance to local communities, as well as their research and educational potential.

    - **Policy COS-7.1: Archaeological Protection.** Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.

    - **Policy COS-7.2: Open Space Easements.** Require development to avoid archeological resources whenever possible. If complete avoidance is not possible, require development to fully mitigate impacts to archaeological resources.

    - **Policy COS-7.3: Archaeological Collections.** Require the appropriate treatment and preservation of archaeological collections in a culturally appropriate manner.

    - **Policy COS-7.4: Consultation with Affected Communities.** Require consultation with affected communities, including local tribes, to determine the appropriate treatment of cultural resources.

    - **Policy COS-7.5: Treatment of Human Remains.** Require human remains be treated with the utmost dignity and respect and that the disposition and handling of human remains would be done in consultation with the MLD and under the requirements of federal, state, and County regulations.

- **Goal COS-8: Protection and Conservation of the Historic Built Environment.** Protection, conservation, use, and enjoyment of the County's important historic resources.

    - **Policy COS-8.1: Preservation and Adaptive Reuse.** Encourage the preservation and/or adaptive reuse of historic sites, structures, and landscapes as a means of protecting important historic resources as part of the discretionary application process, and encourage the preservation of historic structures identified during the ministerial application process.

Notwithstanding the forgoing, the Proposed Project is exempt from the requirement that the County of San Diego approve any discretionary permits, including a grading permit, pursuant to CPUC General Order 131-E, Sections XI and XIII.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed and no policies that are relevant to tribal cultural resources and the Proposed Project were identified (County of San Diego 2020).

Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan

Chapter 3.1 of the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan identifies the following issue, goal, and policy pertaining to cultural resources (County of San Diego 2011), provided verbatim:

- **Issue COS 1.4**: The Subregion with its oak woodlands, rock outcrops, and drainages has a high potential for archaeological resources. Within the Subregion, four major prehistoric Indian villages, two historic villages, and over 50 other archaeological sites have been identified.

- **Goal COS 1.4:** The preservation of identified archaeological sites through identification and protection of sites in conjunction with development.

    - **Policy COS 1.4.1:** Require undisturbed onsite preservation of significant archaeological sites through open space easements or site sealing.

3.6.2.3.2 City of El Cajon

City of El Cajon General Plan

The following verbatim goal that is relevant to cultural resources and the Proposed Project is derived from Chapter 2 of the City of El Cajon General Plan (City of El Cajon 2000):

- **Goal 14-1.3**: Demolition or removal of an historic structure will require review under the California Environmental Quality Act.

3.6.3 Impact Analysis and Mitigation Measures

3.6.3.1 Analysis Methodology

The impact analysis for archaeological and historical resources is based on information summarized in Section 3.6.1 Environmental Setting that was obtained from reviews of the following sources:

- a cultural resources records and literature search of documents and maps on file at the SCIC via the CHRIS inventory;
- a cultural resource records and literature search of documents and maps on file with the CNF Heritage Program Manager at the Rancho Bernardo Supervisor's Office;
- Attachment 3.6-A: Cultural Resources Technical Report;
- Sacred Lands File searches at the NAHC;
- Native American tribal outreach from individuals recommended by the NAHC as people who may have information concerning the Proposed Project; and
- historic aerial images, maps, photographs, and archival materials via desktop reviews.

3.6.3.2 Applicant-Proposed Measures

The following applicant-proposed measures (APMs) would be implemented for the Proposed Project:

- **APM CUL-01**: **Project Redesign**. SDG&E will seek to redesign the proposed alignment to substantially lessen the potential for significant impacts to archaeological sites that have either been determined eligible to the CRHR or are assumed eligible for the purpose of the Project. If SDG&E is unable to redesign the alignment to avoid the potentially eligible archaeological sites, then the archaeological sites will need to undergo testing in order to evaluate them for eligibility to the CRHR (see APM CUL-02). Based on the preliminary design, six pole locations or associated workspaces could impact the following archaeological sites:

  - CA-SDI-12106/12107;
  - CA-SDI-12108;
  - CA-SDI-12109; and
  - CA-SDI-12110.

- **APM CUL-02: Archaeological Site Testing and Evaluation.** For significant archaeological resources that cannot be avoided through design modifications, SDG&E will prepare a Testing Plan consistent with federal (36 CFR 800.4(b)), if on federal land, and state (CEQA Guidelines §15064.5) requirements. Testing may include Shovel Test Probes (STPs) and Test Excavation Units (TEUs) designed to determine site boundaries, integrity, and eligibility for the NRHP/CRHR. Evaluation efforts will be confined to areas within the direct impact footprint plus a minimal buffer. Native American monitors will be scheduled to be present during fieldwork at precontact resources. Where testing confirms site significance and avoidance remains infeasible, data recovery will be implemented under an approved, SDG&E-prepared Data Recovery Plan to reduce potential effects to a less-than-significant or less-than-adverse level.

- **APM CUL-03: Cultural Resources Survey.** Prior to final design, a qualified archaeologist will conduct focused cultural resources surveys in any previously uninspected areas, such as new or modified work areas, and/or revised access routes or work pads outside of the previous survey corridor.

- **APM CUL-04: Environmentally Sensitive Area Demarcation.** SDG&E will utilize the survey results to identify archaeological resources determined to be eligible or potentially eligible for the NRHP/CRHR, delineate Environmentally Sensitive Areas (ESAs) for avoidance. ESA boundaries will be established with a buffer of approximately 50 feet beyond the known resource limits using temporary fencing or flagging clearly visible to construction crews. An archaeologist will verify ESA integrity throughout construction. Limited work (e.g., vegetation trimming) may be permitted within ESAs if no ground disturbance occurs and an archaeological monitor is present.

- **APM CUL-05: Utilize Existing Disturbance Areas.** Unpaved access road use across eligible or potentially eligible archaeological sites will be restricted to rubber-tired

vehicles only; tracked vehicles may be used only with protective matting or capping. When unpaved existing roads cross known eligible or potentially eligible archaeological sites, no grading or excavation will occur within the site boundaries. Required road maintenance within site boundaries will employ hand tools to level the roadbed or fill depressions. If required, fill material will be sourced from outside the archaeological site.

- **APM CUL-06: Archaeological Monitoring.** SDG&E will conduct archaeological and Native American monitoring for earth-disturbing activities within 50 feet of eligible or potentially eligible archaeological sites and ESAs. The archaeological monitor will flag sensitive areas and coordinate with construction personnel to verify that avoidance measures are followed. In the event of an inadvertent discovery, work will stop within the immediate area until the Principal Investigator (PI) and SDG&E archaeologist determine an appropriate course of action consistent with CEQA, AB 52, and, where applicable, Section 106 of the NHPA. Isolate resources will not constitute a discovery.

- **APM CUL-07: Unanticipated Discovery of Human Remains.** If human remains are encountered during construction, SDG&E will comply with California State law (Health and Safety Code Section 7050.5; PRC Sections 5097.94, 5097.98 and 5097.99). This law specifies that work will stop immediately in any areas where human remains or suspected human remains are encountered. SDG&E will be notified of any such discovery and then contact the Office of the Medical Examiner. The Medical Examiner has two working days to examine the remains after being notified by SDG&E. Under some circumstances a determination may be made without direct input from the Medical Examiner (e.g., when the remains can be positively identified by the archaeologist as being non-human). When the remains are determined to be Native American, the Medical Examiner has 24 hours to notify the NAHC. The NAHC will immediately notify the identified most likely descendant (MLD) and the MLD has 24 hours to make recommendations to the landowner or representative for the respectful treatment or disposition of the remains and grave goods. If the MLD does not make recommendations within 24 hours, the area of the property must be secured from further disturbance. If there are disputes between the landowner and MLD, the NAHC will mediate the dispute to attempt to find a resolution. If mediation fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall re-inter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

In addition, as discussed in Section 3.5 Biological Resources, APM BIO-05 would apply to cultural resources and would be implemented for the Proposed Project. This measure includes archaeological and tribal cultural resource sensitivity training for personnel working in sensitive areas of the Proposed Project.

3.6.3.3 Significance Criteria

Cultural resources are places or objects that are important for historical, scientific, and religious reasons and are of concern to cultures, communities, groups, or individuals. These resources may include buildings and architectural remains, archaeological sites, and other artifacts that provide evidence of past human activity, human remains, or TCRs. CEQA, its Guidelines, and other

provisions of the PRC address the protection and preservation of significant cultural resources (i.e., "historical resources" and "unique archaeological resources").

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For cultural resources, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Title 14 Cal. Code Regs. Section 15064.5? This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.

- Cause a substantial adverse change in the significance of an archaeological resource as defined by Title 14 Cal. Code Regs. Section 15064.5? This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.

- Disturb human remains, including those interred outside of formal cemeteries?

CEQA discusses impacts to "cultural and historical resources" and "unique archaeological sites," and the terms "significant cultural resource" and "historic property" also apply in the context of the NHPA and federal activities that may impact cultural resources.

3.6.3.4 Impact Analysis

3.6.3.4.1 Impact CUL-01: Would the project cause a substantial adverse change in the significance of an historic resource pursuant to Section 15064.5?

Construction

Less-than-Significant Impact with Mitigation. As described in Section 7.1.2 of Attachment 3.6-A: Cultural Resources Technical Report, one historic resource may be adversely impacted by the Proposed Project. The property at 19515 Japatul Road is located along the Proposed Project's above-ground alignment centerline. As the property owner at 19515 Japatul Road did not grant access during the architectural survey, an evaluation of the property's CRHR eligibility could not be completed. As such, and for the purpose of this EIR, the property is assumed eligible for the CRHR and would need to be avoided through an alignment redesign. However, if the property owner grants access and the property is evaluated and determined not to be eligible to the CRHR, no further action would be required and the Proposed Project would proceed as planned.

If the property is determined eligible to the CRHR, SDG&E would implement mitigation measure (MM) CUL-01, which requires treatment of the structure through documentation and photography for the historic record prior to demolition. The following MM is prescribed:

- **MM CUL-01: Evaluate Historic Resources and Assess Impacts.** Once access is possible, SDG&E will survey 19515 Japatul Road and evaluate the building for NRHP,

CRHR, or local eligibility for its potential association with locally significant themes of Agriculture, Recreation, Community Development, and Architecture during the mid- to late twentieth century. If the building is deemed eligible for NRHP/CRHR inclusion, SDG&E will conduct an impacts assessment. If SDG&E determines that the Project would have significant impacts to the building, SDG&E will coordinate with applicable Project personnel to potentially modify the Project design to avoid significant alterations to the character defining features of the property at 19515 Japatul Road. If significant impacts cannot be avoided, then SDG&E will identify measures to mitigate the significant impacts in accordance with 5020.1(k) of the Public Resources Code, such as requiring a plaque to commemorate its historical importance if a significant resource is demolished.

With the implementation of MM CUL-01, historic resource impacts resulting from construction of the Proposed Project would be less than significant with mitigation.

Operations and Maintenance

No Impact. O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features. As described in Chapter 2 Project Description, O&M would primarily involve regular inspections, vegetation management, and access road management in previously disturbed areas. Therefore, no impacts to historical resources are anticipated during O&M.

3.6.3.4.2 Impact CUL-02: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Construction

Less-than-Significant Impact with Mitigation. The archaeological investigation resulted in the identification of 11 archaeological sites in the study area. This number excludes isolated finds, which do not qualify as archaeological sites under federal and state statutes. None of the 11 archaeological resources have been formally evaluated for eligibility to the CRHR. Six Proposed Project pole locations or associated workspaces are located within the following known archaeological sites:

- CA-SDI-12106/12107;
- CA-SDI-12108;
- CA-SDI-12109; and
- CA-SDI-12110.

In addition, four poles are located within 100 feet of archaeological sites CA-SDI-5614 and P-37-031212. The 11 archaeological sites in the Proposed Project Area are being treated as eligible to the CRHR for the purpose of the Proposed Project. SDG&E would implement APM CUL-01 to avoid these resources. This APM requires SDG&E to evaluate alternative Proposed Project alignments to prevent significant impacts to archaeological sites that are eligible to the CRHR. APM CUL-04 would be implemented to delineate ESAs, including a 50-foot buffer around each resource that can be avoided. Temporary fencing or flagging would be used to create this buffer and these boundaries would be shown as exclusion zones where no planned grading, trenching,

or equipment staging would occur without further approval from the archaeological monitor and SDG&E. Additionally, SDG&E would implement APM BIO-05, which requires SDG&E's Worker Environmental Awareness Training (WEAP) for construction personnel on the recognition and avoidance of archaeological materials.

In the event that the resource cannot be avoided by revising the Proposed Project design, SDG&E would prepare a Testing Plan to evaluate the significance of the resource in accordance with APM CUL-02. Per APM CUL-02, SDG&E would evaluate the resource for significance via the use of STPs and/or TEUs to evaluate site boundaries, integrity, and eligibility for the CRHR, and NRHP if on federal land. If the test results indicate significance and the resource remains unavoidable, SDG&E would prepare a Data Recovery Plan for agency approval to avoid impacts to the resource. With the implementation of APMs CUL-01 and CUL-02, unavoidable resources would be identified and evaluated, and representative data would be preserved. As a result, impacts would be less than significant.

Approximately 146 acres (or 23 percent) of the Proposed Project Area have not yet been surveyed due to access restrictions. Cultural resources could be located within the unsurveyed areas and could be damaged or destroyed by the Proposed Project's earth-disturbing activities. Per APM CUL-03, cultural resource surveys would be conducted prior to construction for any Proposed Project Areas that were not previously surveyed; this may include areas where landowner permission was not obtained, as well as new or modified Proposed Project components outside of the previous Proposed Project Area. Should resources be identified during the survey, they would be avoided in accordance with APM CUL-01. In the event that avoidance is not feasible, SDG&E would implement APM CUL-02, which would involve evaluating the unavoidable resources for eligibility and conducting data recovery for resources that are deemed significant and cannot be avoided. With the implementation of APMs, resources would either be avoided or unavoidable resources would be identified and evaluated, and representative data would be preserved. As a result, impacts would be less than significant.

Portions of the Proposed Project have been categorized as sensitive for the presence of buried archaeological deposits, as depicted in Appendix C of Attachment 3.6-A: Cultural Resources Technical Report. In order to avoid and reduce the potential for direct impacts to previously unknown archaeological resources in areas determined sensitive for buried archaeological deposits, SDG&E would implement MM CUL-02, which requires the preparation and implementation of a cultural resources monitoring plan. The following MM is prescribed:

- **MM CUL-02: Cultural Resources Monitoring Plan.** SDG&E will develop a Cultural Resources Monitoring Plan prior to the start of construction. The plan shall include, at minimum, information regarding the location of project work areas/sites requiring cultural resources monitoring, how monitoring will be conducted, and the respective roles and responsibilities of the archaeological monitor and the SOI-qualified archaeologist. The plan will describe the methods to be implemented for the protection of cultural resources within the work areas and describe the methods for the treatment of inadvertent or unanticipated discoveries. The plan will be implemented during construction in the areas to which it applies.

APM CUL-06 also involves monitoring for sensitive resources and stopping work in the event of a potential resource discovery so that it can be evaluated. Per APM CUL-06, in the event that new archaeological resources are discovered during the Proposed Project, the archaeological monitors would instruct construction personnel to stop work in the immediate area of the resource until the Principal Investigator, SDG&E archaeologist, and tribal representative, in coordination with the CPUC, determine the appropriate course of action in accordance with CEQA, AB 52, and Section 106 of the NHPA. The Principal Investigator, SDG&E archaeologist, and tribal representative will assess the nature of the deposit with the information available at that time.

Additionally, SDG&E would implement APM BIO-05, which requires SDG&E's WEAP for construction personnel on the recognition of potential buried cultural resources (i.e., prehistoric and/or historical artifacts, objects, or features) during construction. The WEAP would provide construction personnel with instruction on compliance with APMs, mitigation measures, and other Proposed Project requirements, including identification of potential resources and the requirement to halt work in the event of a potential discovery.

With the implementation of APMs CUL-01 through CUL-06, APM BIO-05, and MM CUL-02, no substantial adverse changes to archaeological resources are anticipated, and impacts to archaeological resources as defined in PRC Section 15064.5 would be less than significant with mitigation.

Operations and Maintenance

No Impact. As previously described, O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features. Therefore, no impacts to archaeological resources are anticipated to occur during O&M.

3.6.3.4.3 Impact CUL-03: Would the project disturb, uncover, expose, and/or damage any human remains, including those interred outside of dedicated cemeteries?

Construction

Less-than-Significant Impact. The archaeological pedestrian survey and records search results did not reveal evidence suggesting that any precontact or historic-era marked or unmarked human interments or presence of cremations are present within the Proposed Project Area. However, the location of grave sites and Native American remains can occur outside of identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or other graves could be present within the Proposed Project Area and could be uncovered by Proposed Project-related construction activities.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California HSC Section 7050.5 and PRC Section 5097. These statutes require that, if human remains are discovered, potentially damaging earth-disturbing activities in the area of the remains are halted immediately, and the appropriate county coroner is notified immediately. If the remains are determined by the coroner to be Native American, the NAHC would be notified within 24 hours,

and the guidelines of the NAHC would be followed in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated MLD and the landowner would determine the ultimate treatment and disposition of the remains and take appropriate steps so that additional human interments, if present, are not disturbed, in accordance with California HSC Section 7050.5 and PRC Section 5097. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

If human remains are inadvertently discovered during construction activities, all work in the vicinity of the find would cease within a 50-foot radius of the remains, and cultural resource staff and construction supervisors would be notified as required by APM CUL-07. Further, the County coroner would be contacted in accordance with CEQA Guidelines Section 15064.5(d-e), California HSC Section 7050.5, and PRC Sections 5097.98 and 5097.99. The coroner would have two working days to examine the remains after being notified. If the remains are on federal land and the coroner determines they are Native American or if Native American cultural items pursuant to NAGPRA are uncovered, the remains would be treated in accordance with the provisions of NAGPRA (43 CFR 10) and ARPA (43 CFR 7). If the remains are not on land under federal jurisdiction and the coroner determines that the remains are Native American, the coroner would have 24 hours to notify the NAHC of the determination. Under PRC Section 5097.98, the NAHC would be required to identify a MLD, notify that person, and request that they inspect the remains and make recommendations for treatment and/or disposition. The MLD would have 48 hours after being granted site access to inspect the find and make recommendations for treatment of the human remains. Work would be suspended in the area of the find until the MLD and landowner confer on the mitigation and treatment of the human remains. However, the human remains and associated burial items would be reburied, with appropriate dignity, on the property in a location not subject to further subsurface disturbance and in accordance with landowner agreement if one of the following occurs:

- The NAHC is unable to identify an MLD.
- The MLD fails to make a recommendation.
- The recommendation of the MLD is rejected and the mediation provided in PRC Section 5097.94(k) fails to provide measures acceptable to the landowner.

This procedure would maintain that the remains are treated in accordance with Section 15064.5(d-e) of the CEQA Guidelines, California HSC Section 7050.5, and PRC Sections 5097.98 and 5097.99, and that impacts to human remains during construction would be reduced to a less-than-significant level.

SDG&E would also implement APMs CUL-03, CUL-05, and CUL-06, which require cultural resources surveys, utilizing existing disturbance areas and access roads, and archaeological and Native American monitoring, respectively. The surveys and establishment of ESAs would further reduce the potential for encountering buried human remains. Therefore, potential impacts to human remains during construction would be less than significant.

Operations and Maintenance

No Impact. As previously described, O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features. Therefore, no impacts to human remains are anticipated to occur during O&M.

3.6.4 References

ASM. 2026. Cultural Resources Technical Report for the Suncrest 230 kV Loop-In Project.

Byrd, B. and L. Raab. 2007. Five views of California prehistory: Archaeological perspectives on native California. Altamira Press, Walnut Creek.

California Assembly Bill No. 978. 2001-2002. California Health and Safety Code, Division 7, Part 2, Chapter 5 (California Native American Graves Protection and Repatriation Act), Section 8010-8030. Online. https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=7.&title=&part=2.&chapter=5.&article=. Site accessed February 2026.

City of El Cajon. 2000. The City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited October 13, 2025.

County of San Diego. 2007a. Guidelines for Determining Significance—Cultural Resources: Archaeological and Historic Resources. Land Use and Environment Group, Department of Planning and Land Use and Department of Public Works. First Revision. December 5, 2007

County of San Diego. 2007b. Report Format and Content Requirements—Cultural Resources: Archaeological and Historic Resources. Land Use and Environment Group, Department of Planning and Land Use and Department of Public Works. First Revision. December 5, 2007.

County of San Diego. 2011. General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited December 2025.

County of San Diego. 2011. Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. Online. https://www.sandiegocounty.gov/pds/docs/CP/Crest_CP.pdf. Site visited February 2026.

County of San Diego. 2020. Draft Alpine Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited December 2025.

DeCarlo, Matthew, Jessica Colston, and Micah Hale. 2020. Cultural Resources Inventory for the Trails at Carmel Mountain Ranch Project, Carmel Mountain Ranch Community, City of

San Diego, California. Dudek Project No. 12151. Prepared for New Urban West, San Diego California.

Derry, L., J. McIntyre, and L. White. 1985. Cultural resources overview of the Cleveland National Forest, California. USDA Forest Service.

Kroeber, A. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Washington, D.C.: Smithsonian Institution.

Luomala, Katharine. 1978. "Tipai-Ipai". In Heizer, Robert F. (ed.). Handbook of North American Indians. Vol. 8: California. Washington, DC: Smithsonian Institution. pp. 592–609.Meighan, C. 1954. A Late Complex in southern California prehistory. UCLA Archaeological Survey Annual Report 1954: 106–116.

Meltzer, D. 1993. Search for the first Americans. Smithsonian Books, Washington, D.C.

Moratto, M. 1984. California archaeology. Orlando: Academic Press.

Moriarty, J. 1966. Cultural phase divisions in southern California prehistory. San Diego Museum of Man Paper 3.

NPS. 1997. How to apply the National Register criteria for evaluation. National Register Bulletin 15. Washington, D.C.

NPS. 2024. National Register Bulletin 38 (Update) Identifying, Evaluating, and documenting Traditional Cultural Places. Update to Parker King 1990, updated 1998). December 6, 2024. Online. https://irma.nps.gov/DataStore/DownloadFile/713057. Site visited January 15, 2025.

Parker, P. and T. King. 1998. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin 38. Originally published 1990 (revised 1992), U.S. Department of the Interior, National Park Service, Washington, D.C.

Rogers, M. 1938. Prehistoric man of the desert. San Diego Museum Papers 3.

Rogers, M. 1939. Early lithic industries of the Lower Basin of the Colorado River and adjacent desert areas. San Diego Museum Papers 3.

Rogers, M. 1945. An outline of Yuman prehistory. Southwestern Journal of Anthropology 1(2): 167–198.

True, D. L. 1958. An early complex in San Diego County, California. American Antiquity 23(3): 255–263.

True, D. L. 1966. Archaeological differentiation of shifting communities at San Luis Rey. Ph.D. dissertation, University of California, Los Angeles.

True, D. L. 1970. Investigation of a Late Prehistoric complex in Cuyamaca Rancho State Park, San Diego County, California. University of California Archaeological Survey Annual Report 12: 223–254.

U.S. Census Bureau. 2020. 2020 Census Results Access Data. Online. https://data.census.gov/all?q=san%20diego. Site visited August 18, 2025.

USFS. 2008. Forest Service Manual 2300 – Recreation, Wilderness, and Related Resource Management, Chapter 2360 – Heritage Program Management (Amendment 2300-2008-1). Washington, DC: National Headquarters – Washington Office.

USFS. 2013. Pacific Southwest Region, California State Historic Preservation Officer, Nevada State Historic Preservation Officer, & Advisory Council on Historic Preservation. Programmatic Agreement Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region.

Warren, C. 1964. Cultural change and continuity on the San Diego coast. Unpublished Ph.D. dissertation, University of California, Los Angeles.

Warren, C. 1966. The San Dieguito complex: A review and hypotheses. American Antiquity 31(3): 346–360.

Warren, C. 1967. The San Dieguito–La Jolla continuum. San Diego Museum Papers 5: 1–16.

Warren, C. 1987. The San Dieguito complex and its place in California prehistory. In San Dieguito–La Jolla: Chronology and controversy, pp. 25–40. San Diego County Archaeological Society Research Paper 1.

Warren, C. and D. True. 1961. The San Dieguito complex and its place in California prehistory. University of California Archaeological Survey Annual Report 54: 246–262.

Warren, C., M. Gallegos, and D. True. 1993. Cultural traditions and ecological adaptations of southern California prehistory. Los Angeles: UCLA Institute of Archaeology.

ATTACHMENT 3.6-A: CULTURAL RESOURCES TECHNICAL REPORT

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Attachment 3.6-A: Cultural Resources Technical Report is included in the Administrative Draft Environmental Impact Report Volume 2.

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3.7 ENERGY

This section describes the existing conditions for energy in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt Loop-In (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential environmental impacts that may result during the construction, as well as operations and maintenance (O&M) of the Proposed Project.

The units of energy used in this section are British thermal units (BTU), kilowatt hours (kWh), therms, and gallons. A BTU is the quantity of heat required to raise the temperature of one pound of water 1 degree Fahrenheit (°F) at sea level. Because the other units of energy can all be converted into equivalent BTU, the BTU is used as the basis for comparing energy consumption associated with different resources. A kWh is a unit of electrical energy, and 1 kWh is equivalent to approximately 3,413 BTU, taking into account initial conversion losses (i.e., from one type of energy, such as chemical, to another type of energy, such as mechanical) and transmission losses. Natural gas consumption is described typically in terms of cubic feet or therms; 1 cubic foot of natural gas is equivalent to approximately 1,050 BTU, and 1 therm represents 100,000 BTU. One gallon of gasoline/diesel is equivalent to approximately 125,000/139,000 BTU, respectively, taking into account energy consumed in the refining process.

3.7.1 Environmental Setting

3.7.1.1 Energy Facilities and Services in the Project Area

SDG&E provides electrical and natural gas service in San Diego County and a portion of southern Orange County. Electrical service to the Proposed Project Area is also provided by San Diego Community Power, which is a Community Choice Aggregator (CCA). Clean Energy Alliance provides services to the cities of Oceanside, Vista, Carlsbad, San Marcos, Escondido, and Del Mar outside of the Proposed Project Area. CCAs purchase electricity on behalf of homes and businesses, but SDG&E remains responsible for the delivery of electricity and maintenance of the electrical power lines and substations. Table 3.7-1: San Diego County Energy Providers and Energy Sources in 2023 summarized the types of energy sources provided by SDG&E and San Diego Community Power.

3.7.1.2 Existing Energy Use

In 2023, San Diego County residents collectively consumed approximately 6,969 gigawatt hours (GWh) of electricity, and non-residential consumption was approximately 12,234 GWh (CEC 2023a). Collective natural gas consumption for residents was approximately 299.1 million therms and non-residential consumption was approximately 233.5 million therms (CEC 2023b). Out of all California counties, San Diego County had the third-highest retail gasoline sales in 2023 with 1.003 billion gallons reported. San Diego County had the sixth-highest retail diesel sales in 2023 with 94 million gallons reported (CEC 2023c).

Table 3.7-1: San Diego County Energy Providers and Energy Sources in 2023

Energy Source	Percentage		
	SDG&E	San Diego Community Power	California Clean Energy Alliance
Eligible renewable	41.1	54.5	48.2
Biomass and biowaste	0.7	6.8	0.0
Geothermal	0.0	0.6	0.0
Eligible hydroelectric	0.1	0.5	0.0
Solar	22.6	28.9	26.3
Wind	18.0	17.7	21.9
Large hydroelectric	0.2	4.0	28.4
Nuclear	0.0	0.0	0.0
Coal	0.0	0.0	0.0
Natural gas	58.4	0.0	0.0
Other	0.0	0.0	0.4
Unspecified power[1]	0.0	44.6	23.0
Total	**100**	**100**	**100**

Source: California Energy Commission (CEC) 2024a

In 2024, California residents collectively consumed approximately 99,880 gigawatt hours (GWh) of electricity, and non-residential consumption was approximately 181,725 GWh (CEC 2025a). Collective natural gas consumption for residents was approximately 4,288 million therms, and non-residential consumption was approximately 6,816 million therms (CEC 2025b).

3.7.1.3 Energy Conservation

SDG&E has several rebates and incentives programs available to agricultural, industrial, and public customers. These programs are intended to encourage energy-saving adjustments, including installation of no-cost measures and information on advanced energy efficiency, battery storage opportunities, and solar photovoltaic installations for multi-family and manufactured housing properties. SDG&E also has the Golden State Rebate program, which enables customers to receive rebates toward purchasing specific energy-efficient products for their homes.

[1] "Unspecified power" is electricity from transactions that is not traceable to specific generation sources.

3.7.2 Regulatory Setting

3.7.2.1 Federal

3.7.2.1.1 Southern California National Forests Land Management Plan

Part 1 Southern California National Forests Vision of the Land Management Plan considers opportunities for energy development and support of infrastructure on forest and grasslands through the following goal and associated objective:

- **National Strategic Plan Goal 4:** Help meet energy resource needs.

- **Objective:** Work with other agencies to identify and designate corridors for energy facilities, improve permit application processing efficiency, and establish appropriate land tenure (including transferability clauses) in easements and other authorizations to provide for long-term project viability.

3.7.2.1.2 National Energy Conservation Policy Act

The National Energy Conservation Policy Act (NECPA) (42 United States [U.S.] Code [U.S.C.] 8201 et seq.) established energy-efficiency standards for consumer projects and includes a residential program for low-income weatherization assistance, grants, and loan guarantees for energy conservation in schools and hospitals, as well as energy efficiency standards for new construction. The NECPA also established fuel economy standards for on-road motor vehicles in the U.S. The National Highway Traffic and Safety Administration, which is part of the U.S. Department of Transportation (DOT), is responsible for establishing additional vehicle standards and revising existing standards under the NECPA. The U.S. DOT is authorized to assess penalties for non-compliance.

3.7.2.1.3 North American Electric Reliability Corporation

The North American Electric Reliability Corporation (NERC) develops and enforces Reliability Standards, annually assesses seasonal and long-term reliability, monitors the bulk power system, and trains industry personnel. NERC is the Electric Reliability Organization for North America and is subject to oversight by the Federal Energy Regulatory Commission. To ensure that voltage levels, reactive flows, and reactive resources are monitored, controlled, and maintained within limits in real time to protect equipment and the reliable operation of the grid, NERC established Reliability Standards TOP-001-5, TOP-002-4, TOP-00305, and TOP-010-1(i) to codify transmission operations requirements (NERC 2024).

3.7.2.1.4 Energy Policy Act of 2005

The Energy Policy Act of 2005 (42 U.S.C. 13201 et seq.) sets equipment energy efficiency standards; seeks to reduce reliance on non-renewable energy resources; and provides incentives to reduce current demand on these resources, including establishing programs to improve the reliability and efficiency of distributed energy resources and systems by integrating advanced energy technologies with grid connectivity.

3.7.2.1.5 Energy and Independence Security Act of 2007

The Energy and Independence Security Act of 2007 (42 U.S.C. 17001) sets federal energy management requirements in several areas, including the following:

- energy reduction goals for federal buildings,
- facility management and benchmarking,
- performance standards for new buildings and major renovations,
- high-performance buildings,
- energy savings performance contracts,
- metering,
- energy-efficient product procurement, and
- reduction in petroleum use by methods that include setting automobile efficiency standards and increases in alternative fuel use.

This act also amends portions of the NECPA, as described previously.

3.7.2.2 State

3.7.2.2.1 Warren-Alquist State Energy Resources Conservation and Development Act

The Warren-Alquist State Energy Resources Conservation and Development Act of 1975 (Warren-Alquist Act) (California Public Resources Code [PRC] § 25000 et seq.) established the CEC. The Warren-Alquist Act directs the CEC to adopt and implement the Building Energy Efficiency Standards as a primary means to reduce wasteful, uneconomical, and unnecessary uses of energy. The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- directing the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California;

- removing the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to the more impartial CEC; and

- directing the CEC to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources (CEC 2024a).

3.7.2.2.2 State of California Energy Action Plan

The CEC and California Public Utilities Commission (CPUC) approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided for California's consumers and taxpayers. It also identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, a second Energy Action Plan was adopted by the CEC and CPUC to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, which is discussed in Section 3.7.2.2.4 Assembly Bill 32 and Senate Bill 32. Rather than produce a new energy action plan, the CEC and CPUC prepared an update that examines the state's ongoing actions in the context of global climate change (CPUC 2024).

3.7.2.2.3 California Renewables Portfolio Standard

In 2002, Senate Bill (SB) 1078 established the California Renewables Portfolio Standard (RPS) Program and required that a retail seller of electricity must purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20-percent standard by December 31, 2017. These retail sellers include electrical corporations, CCAs, and electric service providers. The bill required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS Program by retail sellers, and allocate and award supplemental energy payments (SEPs). SEPs were incentive funds administered by the CEC to cover the above-market costs of renewable energy contracts.

Adopted in 2015, SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030, with interim goals of 40 percent by 2024 and 45 percent by 2027. In 2018, SB 100 accelerated and expanded the standards set forth in SB 350 by establishing the following requirements for electricity sold to retail customers in California per year:

- by December 31, 2024, 44 percent of electricity was required to come from qualifying renewable energy sources;
- by December 31, 2027, 52 percent of electricity is required to come from qualifying renewable energy sources; and
- by December 31, 2030, 60 percent of electricity is required to come from qualifying renewable energy sources.

SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of the retail sales of electricity to California. This bill requires that the achievement of 100 percent zero-carbon electricity does not increase carbon emissions elsewhere in the western grid. Additionally, 100-percent zero-carbon electricity cannot be achieved through resource shuffling. Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the RPS Program requirements described previously.

SB 1020, signed into law in 2022, revises the current state policy outlined in SB 100 to require that eligible renewable energy resources and zero-carbon resources supply the following:

- 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035;

- 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040;
- 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045; and
- 100 percent of electricity procured to serve all state agencies by December 31, 2035.

3.7.2.2.4 Assembly Bill 32 and Senate Bill 32

In 2006, the state legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the legislature enacted SB 32, which extended the horizon year of the state's codified greenhouse gas (GHG) reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40 percent below 1990 levels by 2030. In accordance with AB 32 and SB 32, the California Air Resources Board (CARB) prepares scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (e.g., gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources (CARB 2018).

3.7.2.2.5 State of California Integrated Energy Policy Report

Pursuant to California PRC Section 25301(a), the CEC is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, and conservation; public health and safety; and maintenance of a healthy economy. The CEC's 2023 Integrated Energy Policy Report focuses on accelerating the integration of clean energy sources into the power grid, exploring the role of clean and renewable hydrogen, and forecasting California's energy needs through 2040. It also offers updates on a range of issues, including efforts to decarbonize natural gas, improvements in energy efficiency, developments in the Clean Transportation Program, the implementation of AB 1257, and the progress publicly owned utilities are making in meeting peak demand reserves and margins (CEC 2024b). The CEC published a Draft 2025 Integrated Energy Policy Report[2] for public review and comment on April 23, 2026. The Draft 2025 Integrated Energy Policy Report includes topics such as electricity resource plans, electricity and gas demand forecast, hydrogen, load shift goal updates, and accelerating interconnection and energization. Updates to the Draft 2025 Integrated Energy Policy Report from the 2023 Integrated Energy Policy Report include additional historical data, as well as updated economic, demographic, and electric and gas rates projections. Forecasts for California's energy needs have also been extended from 2040 through 2045 (CEC 2026a).

3.7.2.2.6 State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide emissions, AB 1493 was enacted in 2002. AB 1493 required that CARB set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state to be vehicles whose primary use is non-commercial personal transportation in the state.

[2] As of May 1, 2026, the Draft 2025 Integrated Energy Policy Report had not yet been finalized and was still undergoing public review.

The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles (ZEVs) into a single package of standards called Advanced Clean Cars. In March 2017, CARB voted unanimously to continue with the vehicle GHG emission standards and the ZEV program for cars and light-duty trucks sold in California after 2025 (CARB 2024).

CARB's Truck and Bus Regulation requires all diesel trucks operating in California to be upgraded with 2010 model year engines or newer by January 1, 2023. It also introduced Tier 4 standards for off-road engines, phased in from 2008 to 2015, and adopted the Off-Road Regulation to cut emissions by updating older equipment. As heavy-duty vehicles are major pollution sources, the regulation plays a crucial role in protecting public health, especially in disadvantaged communities, and supports clean air goals under the Diesel Risk Reduction Plan and the State Implementation Plan. Starting January 1, 2020, SB 1 only allows vehicles compliant with this regulation to be registered by the California Department of Motor Vehicles (CARB 2025).

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one co-benefit of implementation of these standards is a reduced demand for petroleum-based fuels.

3.7.2.3 Local

3.7.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan lists the following goal and policies that pertain to the Proposed Project concerning energy throughout its jurisdiction (County of San Diego 2011):

- **Goal LU-4: Inter-jurisdictional Coordination.** Coordination with the plans and activities of other agencies and tribal governments that relate to issues such as land use, community character, transportation, energy, other infrastructure, public safety, and resource conservation and management in the unincorporated County and the region.

- **Policy LU-4.6: Planning for Adequate Energy Facilities.** Participate in the planning of regional energy infrastructure with applicable utility providers to ensure plans are consistent with the County's General Plan and Community Plans and minimize adverse impacts to the unincorporated County.

- **Policy COS-11.5: Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

- **Policy COS-14.3: Sustainable Development.** Require design of residential subdivisions and nonresidential development through "green" and sustainable land development practices to conserve energy, water, open space, and natural resources.

- **Policy COS-14.7: Alternative Energy Sources for Development Projects.** Encourage development projects that use energy recovery, photovoltaic, and wind energy.

- **Policy COS-14.10: Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed and no policies that were relevant to energy and the Proposed Project were identified (County of San Diego 2020).

3.7.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan lists the following goal and policies that pertain to the Proposed Project concerning energy throughout its jurisdiction (City of El Cajon 2000):

- **Policy 1-6.1:** The utilities for all new development and all major redevelopment in the city shall be undergrounded.

- **Policy 1-6.2:** The utilities for all expansion projects in the city shall be undergrounded whenever and wherever practical.

- **Policy 1-6.3:** The City shall continue to coordinate its underground policies and underground projects with the public utilities.

- **Policy 1-6.4:** The City shall continue to coordinate the undergrounding of utilities with street improvement projects.

- **Policy 1-6.5:** Redevelopment funds may be used to achieve the undergrounding of public facilities where other reasonable alternatives cannot be found.

- **Goal 8-8.2:** The City shall support and participate in efforts aimed at water conservation. A reduced level of per capita consumption of water and energy shall be achieved locally through public education, policy actions and code changes.

3.7.2.3.3 SDG&E 2023 Long-Term Procurement Plan

SDG&E has set ambitious goals for its long-term procurement plan, focusing on increasing energy delivered from low or zero-carbon sources and accelerating the adoption of electric vehicles. SDG&E is committed to creating a sustainable future by investing in innovative technologies to ensure the reliable operation of the region's infrastructure for generations to come. SDG&E's procurement program has generated significant economic impact, with a direct

economic impact of $2.59 billion in 2023, contracting with more than 2,000 businesses (SDG&E 2024).

3.7.3 Impact Analysis and Mitigation Measures

3.7.3.1 Analysis Methodology

Impacts to energy were determined based on information summarized in Section 3.7.1 Environmental Setting that was obtained from reviews of the following:

- California Energy Commission's San Diego County Energy Usage Reports, and
- local agency planning documents.

3.7.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to energy.

3.7.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For energy, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

3.7.3.4 Impact Analysis

3.7.3.4.1 Impact EN-01: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Less-than-Significant Impact. Construction activities associated with the Proposed Project would require the short-term consumption of fossil fuel resources (e.g., diesel fuel and gasoline) to power construction equipment, motor vehicles, and helicopters used to build temporary access roads and work areas, as well as to install the overhead and underground transmission lines. Proposed Project construction activities would not require the consumption of natural gas. However, construction would utilize electrical energy from the existing distribution system or a generator to temporarily power construction trailers, lighting, and other equipment.

Short-term fuel consumption from equipment, motor vehicle, and helicopter use during construction would be required to construct the Proposed Project. The volume of diesel and gasoline fuels that are anticipated to be utilized during construction were calculated using the estimated GHG emissions and Air Quality Calculations, which are discussed further in Section 3.9 Greenhouse Gas Emissions and Attachment 3.7-A: Construction Fuel Consumption. Construction of the Proposed Project is estimated to consume a total of approximately 233,363 gallons of gasoline, 941,533 gallons of diesel fuel, and 30,558 gallons of jet fuel, or

approximately 46,673 gallons of gasoline, 188,307 gallons of diesel fuel, and 6,112 gallons of jet fuel per year over a 5-year construction duration.

When available, an existing overhead distribution line near the Proposed Project would be tapped for construction power at the staging yards. This temporary power would be representative of SDG&E's current energy supply portfolio. Portable gas/diesel generators would be used if distribution power is not available and as a backup power source.

Modifications to the existing Suncrest Substation would be conducted within the existing substation fence line, with construction equipment powered by diesel and electricity provided by generators and/or existing substation power as needed. Yearly Proposed Project construction activities would represent less than 0.001 percent of gasoline use, 0.005 percent of diesel use, and less than 0.001 percent of jet fuel use consumed in the state of California in 2024, as indicated in Table 3.7-2: Project and Statewide Fuel Consumption Estimates. Table 3.7-2: Project and Statewide Fuel Consumption Estimates. In addition, construction would be short-term and temporary. The use of fuel would be necessary, efficient, and conservative in nature. As a result, the impact would be less than significant.

Table 3.7-2: Project and Statewide Fuel Consumption Estimates

Fuel type	Construction Use (gallons/year)	State of California Use in 2024 (gallons)	Percent of Statewide Use
Gasoline Use	46,673	13,400,000,000	<0.001
Diesel Use	188,307	3,500,000,000	0.005
Jet Fuel Use	6,112	3,900,000,000	<0.001

Source: CEC 2026b; CEC 2026c; U.S. Energy Information Administration 2026

Operations and Maintenance

Less-than-Significant Impact. Maintenance, including inspections of the SDG&E Proposed Project components, would require limited use of fossil fuels (e.g., diesel, gasoline) for motor vehicle trips and occasional use of off-road equipment, as follows:

- Routine maintenance of the proposed 230 kV transmission line is expected to require approximately one trip per year by crews composed of two people and a vehicle. If unanticipated repairs are needed, two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck would be utilized. If no vehicle access exists, the crew and material would be flown in by helicopter.

- The existing Suncrest Substation will remain unstaffed and monitored remotely. Typical O&M activities of the existing Suncrest Substation would involve routine inspections and preventive maintenance to maintain service reliability, as well as emergency work to maintain or restore service. In general, quarterly inspections are performed on SDG&E's existing substation to inspect each required piece of equipment in accordance with the manufacturer's recommendations. These inspections would be performed without taking the substation out of service. SDG&E typically performs biannual routine ground inspections of substation facilities using existing access roads. O&M of the Suncrest

Substation would cause no change in fuel use as inspections on the existing substation are ongoing.

- Proposed and existing access roads would be used to access the Proposed Project components during O&M activities. Paved roads would typically not require maintenance or repair. However, unpaved roads may require minor maintenance and repairs to allow safe travel of construction vehicles and equipment. These improvements could include minor grading, vegetation trimming/removal, and/or the re-application of road base (e.g., decomposed granite).

O&M work (e.g., high-voltage capital repair or replacement) would be variable, unplanned, and require minimal fuel to power equipment. Additionally, annual comprehensive checks and maintenance would be performed by SDG&E maintenance personnel or qualified contractors and would be incorporated into pre-existing maintenance programs. As a result, construction-related and O&M-related energy would not be used in a wasteful, inefficient, or unnecessary manner and impacts related to energy use would be less than significant.

3.7.3.4.2 Impact EN-02: Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction

No Impact. During construction of the Proposed Project, a temporary increase in the use of fuel for vehicles and construction equipment would occur; however, this temporary increase would not conflict with the long-term goals of the RPS Program because none of the program's requirements are applicable to the Proposed Project. Similarly, because the Proposed Project involves the transportation of electrical energy and not the use of energy, there would be no conflicts with state or local renewable energy or energy efficiency plans. Therefore, there would be no impact.

Operations and Maintenance

No Impact. O&M of the Proposed Project would also require minor amounts of electricity and fuel resources; however, usage of minor amounts of electricity and fuel resources would not conflict with the long-term goals of the RPS Program. Additionally, the Proposed Project would not prevent renewable energy sources from being used as a source of electricity in the future. Therefore, the Proposed Project would not conflict with the implementation of the RPS Program, and there would be no impact.

3.7.4 References

CARB. 2018. AB 32 Global Warming Solutions Act of 2006. Online. https://ww2.arb.ca.gov/resources/fact-sheets/ab-32-global-warming-solutions-act-2006. Site visited April 2025.

CARB. 2024. Advanced Clean Cars Program. Online. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about. Site visited April 2025.

CARB. 2025. Truck and Bus Regulation. Online. https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation/about. Site visited April 2025.

CEC. 2023a. California Electricity Consumption. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0. Site visited April 2025.

CEC. 2023b. California Natural Gas Consumption. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1. Site visited April 2025.

CEC. 2023c. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting. Site visited April 2025.

CEC. 2024a. About. Online. https://www.energy.ca.gov/about. Site visited April 2025.

CEC. 2024b. 2023 Integrated Energy Policy Report. Online. https://efiling.energy.ca.gov/GetDocument.aspx?tn=254463. Site visited April 2025.

CEC. 2026a. Draft 2025 Integrated Energy Policy Report. Online. https://www.energy.ca.gov/publications/2026/2025-integrated-energy-policy-report. Site visited April 2026.

CEC. 2026b. California Gasoline Data, Facts, and Statistics. Online. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics. Site visited March 2026.

CEC. 2026c. California Diesel Data, Facts, and Statistics. Online. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics. Site visited March 2026.City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Site visited April 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 2025.

CPUC 2025a. California Electricity Consumption. Online. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy. Accessed November 2025

CPUC 2025b. California Natural Gas Consumption. Online. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-1. Site visited November 2025.

NERC. 2024. Reliability Standards. Online. https://www.nerc.com/pa/Stand/Pages/ReliabilityStandards.aspx. Site visited April 2025.

Office of Administrative Law. 2024. CCR. Online. https://oal.ca.gov/publications/ccr/. Site visited April 2025.

SDG&E. 2024. SDG&E'S Supply Chain Boosts Economy by $2.6 Billion in 2023. Online. https://www.sdgetoday.com/news/sdges-supply-chain-boosts-economy-26-billion-2023. Site visited April 2026.

U.S. Energy Information Administration. 2022. Table F2: Jet fuel consumption, price, and expenditure estimates, 2024. Online. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_jf.html&sid=CA. Sited visited March 2026.

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ATTACHMENT 3.7-A: CONSTRUCTION FUEL CONSUMPTION

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Table 1: EMFAC Emissions Inventory - Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Trips	Fuel Consumption	Efficiency
San Diego County APCD	2027	HHDT	Aggregate	Aggregate	Gasoline	5.043750208	154199.0969	154199.1	32999.32	38.25465059	4.030858851
San Diego County APCD	2027	HHDT	Aggregate	Aggregate	Diesel	15666.85429	598243597.7	5.98E+08	73607682	97100.98408	6.161045672
San Diego County APCD	2027	LDA	Aggregate	Aggregate	Gasoline	1146055.771	16074505170	1.61E+10	1.85E+09	535651.0521	30.00928516
San Diego County APCD	2027	LDA	Aggregate	Aggregate	Diesel	4117.071769	42332484.91	42332485	6008090	1035.042217	40.89928336
San Diego County APCD	2027	LDT1	Aggregate	Aggregate	Gasoline	116912.8927	1405746321	1.41E+09	1.76E+08	57841.95691	24.30322894
San Diego County APCD	2027	LDT1	Aggregate	Aggregate	Diesel	23.9953913	119639.4598	119639.5	23104.54	5.114511519	23.39215767
San Diego County APCD	2027	LDT2	Aggregate	Aggregate	Gasoline	559246.7967	7919437137	7.92E+09	9.03E+08	326237.8691	24.27503943
San Diego County APCD	2027	LDT2	Aggregate	Aggregate	Diesel	2153.007006	31139545.91	31139546	3521135	984.0168911	31.64533677
San Diego County APCD	2027	MHDT	Aggregate	Aggregate	Gasoline	3313.679473	64008516.47	64008516	21680132	13038.57169	4.909166281
San Diego County APCD	2027	MHDT	Aggregate	Aggregate	Diesel	18264.2497	235774861.2	2.36E+08	66249838	27452.39976	8.588497297
San Diego County APCD	2028	HHDT	Aggregate	Aggregate	Gasoline	4.501556304	156023.8994	156023.9	29451.95	37.76600495	4.131331858
San Diego County APCD	2028	HHDT	Aggregate	Aggregate	Diesel	15874.50981	602495157.8	6.02E+08	74706373	95980.02496	6.277297365
San Diego County APCD	2028	LDA	Aggregate	Aggregate	Gasoline	1138655.227	16053287638	1.61E+10	1.83E+09	524669.2613	30.59696617
San Diego County APCD	2028	LDA	Aggregate	Aggregate	Diesel	3597.182431	37279498.77	37279499	5276439	901.1102965	41.37062789
San Diego County APCD	2028	LDT1	Aggregate	Aggregate	Gasoline	113388.8155	1368348304	1.37E+09	1.7E+08	55386.83136	24.70530035
San Diego County APCD	2028	LDT1	Aggregate	Aggregate	Diesel	13.93693392	71540.08293	71540.08	13492.04	2.945116505	24.29108757
San Diego County APCD	2028	LDT2	Aggregate	Aggregate	Gasoline	560389.5503	7960773730	7.96E+09	9.04E+08	321342.9824	24.7734482
San Diego County APCD	2028	LDT2	Aggregate	Aggregate	Diesel	2162.541275	31218384.68	31218385	3526888	969.4044749	32.20367297
San Diego County APCD	2028	MHDT	Aggregate	Aggregate	Gasoline	3256.178819	63355253.32	63355253	21303928	12775.16531	4.959251156
San Diego County APCD	2028	MHDT	Aggregate	Aggregate	Diesel	18382.0313	234588896.7	2.35E+08	66733442	27162.20521	8.636592463
San Diego County APCD	2029	HHDT	Aggregate	Aggregate	Gasoline	4.148868333	158288.9772	158289	27144.45	37.46642774	4.224821708
San Diego County APCD	2029	HHDT	Aggregate	Aggregate	Diesel	16018.91072	605638516.2	6.06E+08	75548637	94701.91615	6.395208681
San Diego County APCD	2029	LDA	Aggregate	Aggregate	Gasoline	1131921.21	16036302442	1.6E+10	1.82E+09	514731.4881	31.15469485
San Diego County APCD	2029	LDA	Aggregate	Aggregate	Diesel	3138.761023	32705225.78	32705226	4622944	781.5409802	41.84710285
San Diego County APCD	2029	LDT1	Aggregate	Aggregate	Gasoline	110049.4691	1333503283	1.33E+09	1.65E+08	53108.01478	25.10926625
San Diego County APCD	2029	LDT1	Aggregate	Aggregate	Diesel	9.071905132	48034.62749	48034.63	8817.357	1.964969441	24.44548321
San Diego County APCD	2029	LDT2	Aggregate	Aggregate	Gasoline	561447.6069	7995244695	8E+09	9.05E+08	316736.0332	25.24261169
San Diego County APCD	2029	LDT2	Aggregate	Aggregate	Diesel	2168.08014	31251936.35	31251936	3526954	954.3392018	32.74719962
San Diego County APCD	2029	MHDT	Aggregate	Aggregate	Gasoline	3190.933514	62266677.17	62266677	20877053	12438.39957	5.006003932
San Diego County APCD	2029	MHDT	Aggregate	Aggregate	Diesel	18391.52691	231980947.4	2.32E+08	66809531	26712.54901	8.684343349
San Diego County APCD	2030	HHDT	Aggregate	Aggregate	Gasoline	3.812080728	159519.2615	159519.3	24940.98	37.07818304	4.302240521
San Diego County APCD	2030	HHDT	Aggregate	Aggregate	Diesel	16110.17793	607884614	6.08E+08	76169863	93373.86612	6.510222177
San Diego County APCD	2030	LDA	Aggregate	Aggregate	Gasoline	1125996.514	16023999209	1.6E+10	1.81E+09	505862.3499	31.67659979
San Diego County APCD	2030	LDA	Aggregate	Aggregate	Diesel	2728.528241	28641310.06	28641310	4037981	675.7769225	42.38278803
San Diego County APCD	2030	LDT1	Aggregate	Aggregate	Gasoline	106804.2222	1300598948	1.3E+09	1.6E+08	50973.39719	25.51524953
San Diego County APCD	2030	LDT1	Aggregate	Aggregate	Diesel	3.300868232	21087.76479	21087.76	3435.947	0.842206694	25.0387048
San Diego County APCD	2030	LDT2	Aggregate	Aggregate	Gasoline	562454.2273	8024115658	8.02E+09	9.06E+08	312420.0126	25.68374411
San Diego County APCD	2030	LDT2	Aggregate	Aggregate	Diesel	2167.690441	31229258.97	31229259	3519338	938.3299397	33.28174627
San Diego County APCD	2030	MHDT	Aggregate	Aggregate	Gasoline	3116.810947	60749980.87	60749981	20392097	12031.59571	5.049203975
San Diego County APCD	2030	MHDT	Aggregate	Aggregate	Diesel	18291.87857	227982638.8	2.28E+08	66477395	26105.94242	8.732978685

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Air District
Region: San Diego County APCD
Calendar Year: 2027, 2028, 2029, 2030

Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for Combustion VMT and Electric VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Fuel Consumption, kg/year for Hydrogen Consumption

Table 2: On-Road Fuel Efficiency (miles/gallon)

Vehicle Category	Year	Fuel	Efficiency	Lookup
passenger	2026	Gasoline	25.72	passenger_Gasoline
vendor	2026	Gasoline	4.91	vendor_Gasoline
hhdt	2026	Gasoline	4.03	hhdt_Gasoline
passenger	2026	Diesel	29.83	passenger_Diesel
vendor	2026	Diesel	8.59	vendor_Diesel
hhdt	2026	Diesel	6.16	hhdt_Diesel

Table 3: Fuel Consumption Calcs

EquipIndex	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Hours Per Day	Working Days	On-Off	Load Factor	On Distance	VMT	On Efficiency	On Fuel Use	Off BSFC	Off Use	Helo Efficiency	Helo Use	Fuel Cateogory
1	S-01	Survey and Staking	Pickup - 1/2 Ton	395	Gasoline	2	8	1052	on		25	100	25.7	4089.8					Construction Vehicles
2	S-02	Utility Locates	Air Compressor 340/390hp	390	Diesel	1	8	1052	off	0.48					0.4	81333.4			Construction Equipment
3	S-02	Utility Locates	Backhoe	150	Diesel	2	6	1052	off	0.37					0.4	36169.9			Construction Equipment
4	S-02	Utility Locates	Flatbed truck	350	Diesel	2	10	1052	on		20	80	6.2	13660.0					Construction Vehicles
5	S-02	Utility Locates	Pickup - 1 Ton	410	Diesel	2	10	1052	on		25	100	29.8	3526.4					Construction Vehicles
6	S-03	Mobilization	Backhoe	150	Diesel	2	6	47	off	0.37					0.4	1616.0			Construction Equipment
7	S-03	Mobilization	Boom truck	150	Diesel	1	3	47	off	0.29					0.4	316.6			Construction Equipment
8	S-03	Mobilization	Flatbed truck	350	Diesel	1	10	47	on		20	40	6.2	305.1					Construction Vehicles
9	S-03	Mobilization	Forklift	100	Diesel	2	8	47	off	0.2					0.4	863.2			Construction Equipment
10	S-03	Mobilization	Gang truck	350	Diesel	2	8	47	on		25	100	29.8	157.5					Construction Vehicles
11	S-03	Mobilization	Generator 150-260 kW	260	Diesel	1	10	47	off	0.74					0.4	4668.3			Construction Equipment
12	S-03	Mobilization	Light plant	10	Diesel	4	2	47	off	0.42					0.4	90.6			Construction Equipment
13	S-03	Mobilization	Pickup - 1 Ton	410	Diesel	4	2	47	on		25	200	29.8	315.1					Construction Vehicles
14	S-03	Mobilization	Flatbed Truck	350	Diesel	2	3	47	on		20	80	6.2	610.3					Construction Vehicles
15	S-03	Mobilization	Water holding tanks	0	Diesel	2	10	47	off	0.42					0.4	0.0			Construction Equipment
16	S-03	Mobilization	Water truck	300	Diesel	2	10	47	on		25	100	6.2	762.9					Construction Vehicles
17	S-04	Access Road Construction	Pickup - 1/2 ton	395	Gasoline	2	2	203	on		25	100	25.7	789.2					Construction Vehicles
18	S-04	Access Road Construction	Pickup - 1 ton	410	Diesel	4	2	203	on		25	200	29.8	1360.9					Construction Vehicles
19	S-04	Access Road Construction	Motor Grader	250	Diesel	2	6	203	off	0.41					0.4	12890.2			Construction Equipment
20	S-04	Access Road Construction	Dump Truck	415	Diesel	3	10	203	on		25	150	6.2	4942.3					Construction Vehicles
21	S-04	Access Road Construction	Skid steer loader	74	Diesel	1	4	203	off	0.37					0.4	1276.0			Construction Equipment
22	S-04	Access Road Construction	Water Truck	300	Diesel	2	6	203	on		25	100	6.2	3294.9					Construction Vehicles
23	S-04	Access Road Construction	D6 Type Dozer	250	Diesel	1	6	203	off	0.43					0.4	6759.5			Construction Equipment
24	S-04	Access Road Construction	Excavator	250	Diesel	2	4	203	off	0.38					0.4	7964.7			Construction Equipment
25	S-04	Access Road Construction	Vibratory Roller	125	Diesel	1	4	203	off	0.38					0.4	1991.2			Construction Equipment
26	S-04	Access Road Construction	Bulldozer	250	Diesel	1	6	203	off	0.43					0.4	6759.5			Construction Equipment
27	S-04	Access Road Construction	Road Grader	250	Diesel	1	6	203	off	0.41					0.4	6445.1			Construction Equipment
28	S-04	Access Road Construction	Loader	230	Diesel	1	2	203	off	0.37					0.4	1783.7			Construction Equipment
29	S-04	Access Road Construction	Mower	48	Diesel	1	3	203	off	0.37					0.4	620.7			Construction Equipment
30	S-05	Conventional Structure Foundation Installation	Compressor	24	Diesel	1	6	303	off	0.48					0.4	1202.0			Construction Equipment
31	S-05	Conventional Structure Foundation Installation	Boom truck	150	Diesel	1	3	303	off	0.29					0.4	2041.3			Construction Equipment
32	S-05	Conventional Structure Foundation Installation	Pressure Digger - Lo-Drill (Track	275	Diesel	1	8	303	off	0.5					0.4	17206.5			Construction Equipment
33	S-05	Conventional Structure Foundation Installation	Concrete Truck	425	Diesel	4	5	303	on		20	160	6.2	7868.8					Construction Vehicles
34	S-05	Conventional Structure Foundation Installation	Pickup - 1 Ton	410	Diesel	4	2	303	on		25	200	29.8	2031.4					Construction Vehicles
35	S-05	Conventional Structure Foundation Installation	Water Truck	300	Diesel	2	6	303	on		25	100	6.2	4918.0					Construction Vehicles
36	S-05	Conventional Structure Foundation Installation	Dump Truck	415	Diesel	3	10	303	on		25	150	6.2	7377.0					Construction Vehicles
37	S-05	Conventional Structure Foundation Installation	Skid steer loader	74	Diesel	1	6	303	off	0.37					0.4	2856.8			Construction Equipment
38	S-05	Conventional Structure Foundation Installation	Forklift - 10 K Reach	130	Diesel	2	2	303	off	0.4					0.4	3253.6			Construction Equipment
39	S-05	Conventional Structure Foundation Installation	Crane - 35 Ton (Manlift)	250	Diesel	2	5	303	off	0.29					0.4	11340.7			Construction Equipment
40	S-05	Conventional Structure Foundation Installation	844 Loader	417	Diesel	1	6	303	off	0.36					0.4	14089.3			Construction Equipment
41	S-05	Conventional Structure Foundation Installation	Rough Terrain Crane	185	Diesel	1	6	303	off	0.29					0.4	5035.3			Construction Equipment
42	S-06	Conventional Structure Installation	Crane - 35 Ton (Manlift)	250	Diesel	2	2	252	off	0.29					0.4	3772.7			Construction Equipment
43	S-06	Conventional Structure Installation	Pickup - 1/2 ton	395	Gasoline	4	2	252	on		25	200	25.7	1959.4					Construction Vehicles
44	S-06	Conventional Structure Installation	Forklift - 15 K Reach	130	Diesel	1	1	252	off	0.4					0.4	676.5			Construction Equipment
45	S-06	Conventional Structure Installation	Pickup - 1 ton	410	Diesel	4	2	252	on		25	200	29.8	1689.4					Construction Vehicles
46	S-06	Conventional Structure Installation	Crane - 200 Ton	275	Diesel	1	4	252	off	0.29					0.4	4150.0			Construction Equipment
47	S-06	Conventional Structure Installation	844 Loader	417	Diesel	1	6	252	off	0.36					0.4	11717.8			Construction Equipment
48	S-06	Conventional Structure Installation	Water Truck	300	Diesel	2	6	252	on		25	100	6.2	4090.2					Construction Vehicles
49	S-10	Helicopter Site Preparation	Helicopter	700	Jet	0	6	203	helicopter								32.0	0.0	Helicopter and Support
50	S-10	Helicopter Site Preparation	Jet Fuel Truck	300	Diesel	1	4	203	on		20	40	8.6	945.5					Construction Vehicles
51	S-10	Helicopter Site Preparation	Mower/Veg Clearing Equipmen	50	Diesel	2	3	203	off	0.34					0.4	1188.4			Construction Equipment
52	S-10	Helicopter Site Preparation	Chipper	50	Diesel	1	3	203	off	0.34					0.4	594.2			Construction Equipment
53	S-10	Helicopter Site Preparation	Jackhammer	0	Diesel	1	2	203	off	0.42					0.4	0.0			Construction Equipment
54	S-07	Helicopter Support	Heavy-Duty Helicopter	3200	Jet	1	2	239	helicopter										Helicopter and Support
55	S-07	Helicopter Support	Helicopter	700	Jet	1	4	239	helicopter								32.0	30558.3	Helicopter and Support
56	S-07	Helicopter Support	Jet Fuel Truck	300	Diesel	1	4	239	on		20	40	8.6	1113.1					Construction Vehicles
57	S-08	Helicopter Landing Pad Construction	Air Compressor 340/390hp	390	Diesel	1	4	203	off	0.48					0.4	7847.3			Construction Equipment
58	S-08	Helicopter Landing Pad Construction	Skid steer loader	74	Diesel	1	4	203	off	0.37					0.4	1276.0			Construction Equipment
59	S-08	Helicopter Landing Pad Construction	Excavator - Mini	108	Diesel	1	4	203	off	0.38					0.4	1720.4			Construction Equipment
60	S-08	Helicopter Landing Pad Construction	Fire Deck (5 hp pump)	5	Diesel	1	1	203	off	0.74					0.4	43.1			Construction Equipment
61	S-08	Helicopter Landing Pad Construction	Water Buffalo Deck (5 hp pump	5	Diesel	1	2	203	off	0.74					0.4	86.2			Construction Equipment
62	S-08	Helicopter Landing Pad Construction	Vibrating Plate	14	Diesel	1	4	203	off	0.43					0.4	280.5			Construction Equipment
63	S-09	Helicopter Landing Platform Construction	Air Compressor 340/390hp	390	Diesel	1	4	203	off	0.48					0.4	7847.3			Construction Equipment

EquipIndex	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Hours Per Day	Working Days	On-Off	Load Factor	On Distance	VMT	On Efficiency	On Fuel Use	Off BSFC	Off Use	Helo Efficiency	Helo Use	Fuel Cateogory
64	S-09	Helicopter Landing Platform Construction	Fire Deck (5 hp pump)	5	Diesel	1	1	203	off	0.74					0.4	43.1			Construction Equipment
65	S-09	Helicopter Landing Platform Construction	Water Buffalo Deck (5 hp pump	5	Diesel	1	2	203	off	0.74					0.4	86.2			Construction Equipment
66	S-09	Helicopter Landing Platform Construction	Generator 25 kW	36	Diesel	1	2	203	off	0.74					0.4	620.7			Construction Equipment
67	S-09	Helicopter Landing Platform Construction	Testing Jack (5 hp pump)	5	Diesel	1	2	203	off	0.74					0.4	86.2			Construction Equipment
68	S-09	Helicopter Landing Platform Construction	Micropile Drill Power Unit	310	Diesel	1	8	203	off	0.5					0.4	12995.0			Construction Equipment
69	S-09	Helicopter Landing Platform Construction	Refueler (small fuel transfer sta	0	Diesel	1	1	203	off	0.42					0.4	0.0			Construction Equipment
70	S-09	Helicopter Landing Platform Construction	Grout Plant	20	Diesel	1	8	203	off	0.56					0.4	1043.9			Construction Equipment
71	S-11	Helicopter Structure Foundation Installation	Air Compressor 340/390hp	390	Diesel	1	4	216	off	0.48					0.4	8349.8			Construction Equipment
72	S-11	Helicopter Structure Foundation Installation	Fire Deck (5 hp pump)	5	Diesel	1	1	216	off	0.74					0.4	45.9			Construction Equipment
73	S-11	Helicopter Structure Foundation Installation	Water Buffalo Deck (5 hp pump	5	Diesel	1	2	216	off	0.74					0.4	91.7			Construction Equipment
74	S-11	Helicopter Structure Foundation Installation	Generator 25 kW	36	Diesel	1	2	216	off	0.74					0.4	660.5			Construction Equipment
75	S-11	Helicopter Structure Foundation Installation	Testing Jack (5 hp pump)	5	Diesel	1	2	216	off	0.74					0.4	91.7			Construction Equipment
76	S-11	Helicopter Structure Foundation Installation	Micropile Drill Power Unit	310	Diesel	1	8	216	off	0.5					0.4	13827.2			Construction Equipment
77	S-11	Helicopter Structure Foundation Installation	Refueler (small fuel transfer sta	0	Diesel	1	1	216	off	0.42					0.4	0.0			Construction Equipment
78	S-11	Helicopter Structure Foundation Installation	Grout Plant	20	Diesel	1	8	216	off	0.56					0.4	1110.7			Construction Equipment
79	S-12	Helicopter Structure Installation	Fire Deck (5 hp pump)	5	Diesel	1	1	164	off	0.74					0.4	34.8			Construction Equipment
80	S-12	Helicopter Structure Installation	Water Buffalo Deck (5 hp pump	5	Diesel	1	2	164	off	0.74					0.4	69.7			Construction Equipment
81	S-12	Helicopter Structure Installation	Generator 25 kW	36	Diesel	1	2	164	off	0.74					0.4	501.5			Construction Equipment
82	S-13	Conductor Installation	Helicopter	700	Jet	0	10	76	helicopter								32.0	0.0	Helicopter and Support
83	S-13	Conductor Installation	Jet Fuel Truck	300	Diesel	0	10	76	on		20	0	8.6	0.0					Construction Vehicles
84	S-13	Conductor Installation	Crane - 35 Ton (Manlift)	250	Diesel	3	5	76	off	0.29					0.4	4266.8			Construction Equipment
85	S-13	Conductor Installation	Pickup - 1/2 ton	395	Gasoline	4	2	76	on		25	200	25.7	590.9					Construction Vehicles
86	S-13	Conductor Installation	Pickup - 1 Ton	410	Diesel	4	2	76	on		25	200	29.8	509.5					Construction Vehicles
87	S-13	Conductor Installation	D8 Sag Dozer	200	Diesel	3	10	76	off	0.43					0.4	10122.6			Construction Equipment
88	S-13	Conductor Installation	Wire Puller	250	Diesel	1	5	76	off	0.42					0.4	2059.8			Construction Equipment
89	S-13	Conductor Installation	Water Truck	300	Diesel	2	6	76	on		25	100	6.2	1233.6					Construction Vehicles
90	S-13	Conductor Installation	Wire Trailer/ Tensioner	250	Diesel	1	5	76	off	0.42					0.4	2059.8			Construction Equipment
91	S-13	Conductor Installation	Wire Puller	250	Diesel	0	3	76	off	0.42					0.4	0.0			Construction Equipment
92	S-13	Conductor Installation	Boom Truck w/Hydraulic Pole P	150	Diesel	1	1	76	off	0.29					0.4	170.7			Construction Equipment
93	S-13	Conductor Installation	Hydraulic Pole Puller	150	Diesel	1	1	76	off	0.29					0.4	170.7			Construction Equipment
94	S-14	Excavate Trench	Backhoe	150	Diesel	2	6	201	off	0.37					0.4	6910.8			Construction Equipment
95	S-14	Excavate Trench	Arrow Board	10	Diesel	2	8	201	off	0.82					0.4	1513.5			Construction Equipment
96	S-14	Excavate Trench	Air Compressor 340/390hp	390	Diesel	1	8	201	off	0.48					0.4	15539.9			Construction Equipment
97	S-14	Excavate Trench	Concrete Saw	13	Diesel	1	2	201	off	0.73					0.4	218.9			Construction Equipment
98	S-14	Excavate Trench	Flatbed truck	350	Diesel	1	10	201	on		20	40	6.2	1305.0					Construction Vehicles
99	S-14	Excavate Trench	Loader	230	Diesel	1	6	201	off	0.37					0.4	5298.3			Construction Equipment
100	S-14	Excavate Trench	Foreman Truck	300	Diesel	3	8	201	on		20	120	29.8	808.5					Construction Vehicles
101	S-14	Excavate Trench	Pickup - 1 Ton	410	Diesel	4	2	201	on		25	200	29.8	1347.5					Construction Vehicles
102	S-14	Excavate Trench	Trackhoe	250	Diesel	4	4	201	off	0.38					0.4	15772.4			Construction Equipment
103	S-14	Excavate Trench	Trencher	75	Diesel	2	5	201	off	0.5					0.4	4325.9			Construction Equipment
104	S-14	Excavate Trench	Dump Truck	415	Diesel	3	8	201	on		25	150	6.2	4893.6					Construction Vehicles
105	S-14	Excavate Trench	Water truck	300	Diesel	1	6	201	on		25	50	6.2	1631.2					Construction Vehicles
106	S-14	Excavate Trench	Light plant	10	Diesel	4	10	201	off	0.42					0.4	1938.0			Construction Equipment
107	S-15	Duct Bank & Conduit Installation	Backhoe	150	Diesel	2	6	199	off	0.37					0.4	6842.0			Construction Equipment
108	S-15	Duct Bank & Conduit Installation	Arrow Board	10	Diesel	2	8	199	off	0.82					0.4	1498.4			Construction Equipment
109	S-15	Duct Bank & Conduit Installation	Air Compressor 340/390hp	390	Diesel	1	8	199	off	0.48					0.4	15385.3			Construction Equipment
110	S-15	Duct Bank & Conduit Installation	Flatbed truck	350	Diesel	1	10	199	on		20	40	6.2	1292.0					Construction Vehicles
111	S-15	Duct Bank & Conduit Installation	Loader	230	Diesel	1	6	199	off	0.37					0.4	5245.6			Construction Equipment
112	S-15	Duct Bank & Conduit Installation	Pickup - 1 Ton	410	Diesel	4	2	199	on		25	200	29.8	1334.1					Construction Vehicles
113	S-15	Duct Bank & Conduit Installation	Trackhoe	250	Diesel	4	4	199	off	0.38					0.4	15615.4			Construction Equipment
114	S-15	Duct Bank & Conduit Installation	Trencher	75	Diesel	2	5	199	off	0.5					0.4	4282.9			Construction Equipment
115	S-15	Duct Bank & Conduit Installation	Water truck	300	Diesel	1	6	199	on		25	50	6.2	1615.0					Construction Vehicles
116	S-16	Cable Installation	Cable Reel	175	Diesel	1	5	227	off	0.42					0.4	4306.7			Construction Equipment
117	S-16	Cable Installation	Arrow Board	10	Diesel	2	8	227	off	0.82					0.4	1709.3			Construction Equipment
118	S-16	Cable Installation	Pulling Rig	175	Diesel	1	5	227	off	0.42					0.4	4306.7			Construction Equipment
119	S-17	Paving	Concrete Truck	425	Diesel	5	2	201	on		20	200	6.2	6524.9					Construction Vehicles
120	S-17	Paving	Grinder	15	Diesel	1	3	201	off	0.42					0.4	218.0			Construction Equipment
121	S-17	Paving	Arrow Board	10	Diesel	2	8	201	off	0.82					0.4	1513.5			Construction Equipment
122	S-17	Paving	Bitumen (emulsion) sprayer, tra	5	Diesel	1	1	201	off	0.42					0.4	24.2			Construction Equipment
123	S-17	Paving	A/C Roller 5-7 Ton	74	Diesel	1	8	201	off	0.38					0.4	2595.1			Construction Equipment
124	S-17	Paving	Backhoe	150	Diesel	1	6	201	off	0.37					0.4	3455.4			Construction Equipment
125	S-17	Paving	Flatbed truck	350	Diesel	1	10	201	on		20	40	6.2	1305.0					Construction Vehicles
126	S-17	Paving	Pickup - 1 Ton	410	Diesel	4	2	201	on		25	200	29.8	1347.5					Construction Vehicles
127	S-18	Site Preparation	Backhoe	150	Diesel	2	6	78	off	0.37					0.4	2681.8			Construction Equipment

EquipIndex	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Hours Per Day	Working Days	On-Off	Load Factor	On Distance	VMT	On Efficiency	On Fuel Use	Off BSFC	Off Use	Helo Efficiency	Helo Use	Fuel Cateogory
128	S-18	Site Preparation	Boom truck	150	Diesel	1	1	78	off	0.29					0.4	175.2			Construction Equipment
129	S-18	Site Preparation	Flatbed truck	350	Diesel	0	10	78	on		20	0	6.2	0.0					Construction Vehicles
130	S-18	Site Preparation	Forklift	100	Diesel	1	8	78	off	0.2					0.4	716.3			Construction Equipment
131	S-18	Site Preparation	Loader	230	Diesel	1	2	78	off	0.37					0.4	685.3			Construction Equipment
132	S-18	Site Preparation	Pickup - 1 Ton	410	Diesel	4	2	78	on		25	200	29.8	522.9					Construction Vehicles
133	S-18	Site Preparation	Flatbed Truck	350	Diesel	2	3	78	on		20	80	6.2	1012.8					Construction Vehicles
134	S-18	Site Preparation	Water truck	300	Diesel	1	6	78	on		25	50	6.2	633.0					Construction Vehicles
135	S-19	Below-Grade Construction	Water Truck	300	Diesel	1	6	300	on		25	50	6.2	2434.7					Construction Vehicles
136	S-19	Below-Grade Construction	Excavator	250	Diesel	2	8	300	off	0.38					0.4	23540.9			Construction Equipment
137	S-19	Below-Grade Construction	Forklift - 15 K Reach	130	Diesel	1	0	300	off	0.4					0.4	0.0			Construction Equipment
138	S-19	Below-Grade Construction	Backhoe - 2X4	68	Diesel	2	6	300	off	0.37					0.4	5198.3			Construction Equipment
139	S-19	Below-Grade Construction	Pickup - 1/2 Ton	395	Gasoline	4	2	300	on		25	200	25.7	2332.6					Construction Vehicles
140	S-19	Below-Grade Construction	Pickup - 1 Ton	410	Diesel	4	2	300	on		25	200	29.8	2011.2					Construction Vehicles
141	S-19	Below-Grade Construction	Excavator - Mini	108	Diesel	1	8	300	off	0.38					0.4	5084.8			Construction Equipment
142	S-19	Below-Grade Construction	Generator 25 kW	36	Diesel	1	8	300	off	0.74					0.4	3669.4			Construction Equipment
143	S-19	Below-Grade Construction	Concrete Truck	425	Diesel	4	5	300	on		20	160	6.2	7790.9					Construction Vehicles
144	S-19	Below-Grade Construction	Loader	230	Diesel	2	8	300	off	0.37					0.4	21087.7			Construction Equipment
145	S-19	Below-Grade Construction	Pressure Digger - Lo-Drill (Track	275	Diesel	1	5	300	off	0.5					0.4	10647.6			Construction Equipment
146	S-19	Below-Grade Construction	Dump Truck	415	Diesel	3	10	300	on		25	150	6.2	7304.0					Construction Vehicles
147	S-19	Below-Grade Construction	Tool - Van/Conex 20'	0	Diesel	1	3	300	on		25	50	29.8	502.8					Construction Vehicles
148	S-19	Below-Grade Construction	Trencher	75	Diesel	2	5	300	off	0.5					0.4	6456.6			Construction Equipment
149	S-19	Below-Grade Construction	Skid steer loader	74	Diesel	2	8	300	off	0.37					0.4	7542.7			Construction Equipment
150	S-19	Below-Grade Construction	Wire Trailer/ Tensioner	250	Diesel	1	5	300	off	0.42					0.4	8130.9			Construction Equipment
151	S-19	Below-Grade Construction	Wire Puller	250	Diesel	1	3	300	off	0.42					0.4	4878.5			Construction Equipment
152	S-20	Above-Grade Construction	Wire Trailer/ Tensioner	250	Diesel	1	5	903	off	0.42					0.4	24474.0			Construction Equipment
153	S-20	Above-Grade Construction	Wire Puller	250	Diesel	1	3	903	off	0.42					0.4	14684.4			Construction Equipment
154	S-20	Above-Grade Construction	Pickup - 1/2 Ton	395	Gasoline	4	2	903	on		25	200	25.7	7021.0					Construction Vehicles
155	S-20	Above-Grade Construction	Pickup - 1 Ton	410	Diesel	4	2	903	on		25	200	29.8	6053.9					Construction Vehicles
156	S-20	Above-Grade Construction	Welding Truck	250	Diesel	2	2	903	on		25	100	29.8	3026.9					Construction Vehicles
157	S-20	Above-Grade Construction	Generator 25 kW	36	Diesel	2	8	903	off	0.74					0.4	22089.9			Construction Equipment
158	S-20	Above-Grade Construction	Crane - 35 Ton (Manlift)	250	Diesel	2	5	903	off	0.29					0.4	33797.4			Construction Equipment
159	S-20	Above-Grade Construction	Forklift - 10 K Reach	130	Diesel	2	8	903	off	0.4					0.4	38785.4			Construction Equipment
160	S-20	Above-Grade Construction	Forklift - 15 K Reach	130	Diesel	1	8	903	off	0.4					0.4	19392.7			Construction Equipment
161	S-20	Above-Grade Construction	Loader	230	Diesel	2	8	903	off	0.37					0.4	63473.9			Construction Equipment
162	S-20	Above-Grade Construction	120' Manlift	74	Diesel	2	5	903	off	0.31					0.4	11888.7			Construction Equipment
163	S-20	Above-Grade Construction	Crane - 200 Ton	275	Diesel	1	4	903	off	0.29					0.4	14870.9			Construction Equipment
164	S-21	Commissioning and Testing	Pickup - 1/2 Ton	395	Gasoline	4	2	253	on		25	200	25.7	1967.1					Construction Vehicles
165	S-21	Commissioning and Testing	Pickup - 1 Ton	410	Diesel	4	2	253	on		25	200	29.8	1696.2					Construction Vehicles
166	S-21	Commissioning and Testing	Crane - 35 Ton (Manlift)	250	Diesel	1	5	253	off	0.29					0.4	4734.6			Construction Equipment
167	S-21	Commissioning and Testing	Water Truck	300	Diesel	1	6	253	on		25	50	6.2	2053.2					Construction Vehicles
168	S-21	Commissioning and Testing	Tool - Van/Conex 20'	0	Diesel	3	3	253	on		25	150	29.8	1272.1					Construction Vehicles
169	S-22	Site & ROW Restoration (overhead)	Pickup - 1/2 ton	395	Gasoline	4	2	127	on		25	200	25.7	987.5					Construction Vehicles
170	S-22	Site & ROW Restoration (overhead)	Dump Truck	415	Diesel	2	10	127	on		25	100	6.2	2061.3					Construction Vehicles
171	S-22	Site & ROW Restoration (overhead)	Skid steer loader	74	Diesel	1	6	127	off	0.37					0.4	1197.4			Construction Equipment
172	S-22	Site & ROW Restoration (overhead)	Water Truck	300	Diesel	2	6	127	on		25	100	6.2	2061.3					Construction Vehicles
173	S-22	Site & ROW Restoration (overhead)	Excavator	250	Diesel	0	0	127	off	0.38					0.4	0.0			Construction Equipment
174	S-22	Site & ROW Restoration (overhead)	D6 Type Dozer	250	Diesel	1	6	127	off	0.43					0.4	4228.8			Construction Equipment
175	S-22	Site & ROW Restoration (overhead)	Motor Grader	250	Diesel	1	6	127	off	0.41					0.4	4032.1			Construction Equipment
176	S-22	Site & ROW Restoration (overhead)	Grader	250	Diesel	0	0	127	off	0.41					0.4	0.0			Construction Equipment
177	S-22	Site & ROW Restoration (overhead)	Haul Truck	425	Diesel	1	10	127	on		25	50	6.2	1030.7					Construction Vehicles
178	S-22	Site & ROW Restoration (overhead)	Excavator - Mini	108	Diesel	1	6	127	off	0.38					0.4	1614.4			Construction Equipment
179	S-22	Site & ROW Restoration (overhead)	Boom Truck w/Hydraulic Pole P	150	Diesel	0	0	127	off	0.29					0.4	0.0			Construction Equipment
180	S-22	Site & ROW Restoration (overhead)	Water Truck	300	Diesel	1	6	127	on		25	50	6.2	1030.7					Construction Vehicles
181	S-22	Site & ROW Restoration (overhead)	Hydroseed truck	425	Diesel	1	6	127	on		25	50	8.6	739.4					Construction Vehicles
182	S-22	Site & ROW Restoration (overhead)	Pickup - 1 Ton	410	Diesel	1	3	127	on		25	50	29.8	212.9					Construction Vehicles
183	S-23	Site & ROW Restoration (underground)	Pickup - 1/2 ton	395	Gasoline	4	2	98	on		25	200	25.7	762.0					Construction Vehicles
184	S-23	Site & ROW Restoration (underground)	Dump Truck	415	Diesel	0	0	98	on		25	0	6.2	0.0					Construction Vehicles
185	S-23	Site & ROW Restoration (underground)	Skid steer loader	74	Diesel	1	6	98	off	0.37					0.4	924.0			Construction Equipment
186	S-23	Site & ROW Restoration (underground)	Water Truck	300	Diesel	2	6	98	on		25	100	6.2	1590.6					Construction Vehicles
187	S-23	Site & ROW Restoration (underground)	Excavator	250	Diesel	0	0	98	off	0.38					0.4	0.0			Construction Equipment
188	S-23	Site & ROW Restoration (underground)	D6 Type Dozer	250	Diesel	0	0	98	off	0.43					0.4	0.0			Construction Equipment
189	S-23	Site & ROW Restoration (underground)	Motor Grader	250	Diesel	0	0	98	off	0.41					0.4	0.0			Construction Equipment
190	S-23	Site & ROW Restoration (underground)	Grader	250	Diesel	0	0	98	off	0.41					0.4	0.0			Construction Equipment
191	S-23	Site & ROW Restoration (underground)	Haul Truck	425	Diesel	1	10	98	on		25	50	6.2	795.3					Construction Vehicles

EquipIndex	Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Quantity	Hours Per Day	Working Days	On-Off	Load Factor	On Distance	VMT	On Efficiency	On Fuel Use	Off BSFC	Off Use	Helo Efficiency	Helo Use	Fuel Cateogory
192	S-23	Site & ROW Restoration (underground)	Excavator - Mini	108	Diesel	1	6	98	off	0.38					0.4	1245.8			Construction Equipment
193	S-23	Site & ROW Restoration (underground)	Boom Truck w/Hydraulic Pole P	150	Diesel	1	6	98	off	0.29					0.4	1320.5			Construction Equipment
194	S-23	Site & ROW Restoration (underground)	Water Truck	300	Diesel	1	6	98	on		25	50	6.2	795.3					Construction Vehicles
195	S-23	Site & ROW Restoration (underground)	Hydroseed truck	425	Diesel	1	6	98	on		25	50	8.6	570.5					Construction Vehicles
196	S-23	Site & ROW Restoration (underground)	Pickup - 1 Ton	410	Diesel	1	3	98	on		25	50	29.8	164.3					Construction Vehicles
197	S-01	Survey and Staking	Worker Commute	NA	Gasoline	5	NA	1052	on		40	400	25.7	16359.1					Worker Vehicles
198	S-02	Utility Locates	Worker Commute	NA	Gasoline	5	NA	1052	on		40	400	25.7	16359.1					Worker Vehicles
199	S-03	Mobilization	Worker Commute	NA	Gasoline	11	NA	47	on		40	880	25.7	1607.9					Worker Vehicles
200	S-04	Access Road Construction	Worker Commute	NA	Gasoline	11	NA	203	on		40	880	25.7	6944.8					Worker Vehicles
201	S-05	Conventional Structure Foundation Installation	Worker Commute	NA	Gasoline	19	NA	303	on		40	1520	25.7	17904.8					Worker Vehicles
202	S-06	Conventional Structure Installation	Worker Commute	NA	Gasoline	12	NA	252	on		40	960	25.7	9404.9					Worker Vehicles
203	S-07	Helicopter Support	Worker Commute	NA	Gasoline	14	NA	239	on		40	1120	25.7	10406.4					Worker Vehicles
204	S-08	Helicopter Landing Pad Construction	Worker Commute	NA	Gasoline	5	NA	203	on		40	400	25.7	3156.7					Worker Vehicles
205	S-09	Helicopter Landing Platform Construction	Worker Commute	NA	Gasoline	5	NA	203	on		40	400	25.7	3156.7					Worker Vehicles
206	S-10	Helicopter Site Preparation	Worker Commute	NA	Gasoline	5	NA	203	on		40	400	25.7	3156.7					Worker Vehicles
207	S-11	Helicopter Structure Foundation Installation	Worker Commute	NA	Gasoline	5	NA	216	on		40	400	25.7	3358.9					Worker Vehicles
208	S-12	Helicopter Structure Installation	Worker Commute	NA	Gasoline	5	NA	164	on		40	400	25.7	2550.3					Worker Vehicles
209	S-13	Conductor Installation	Worker Commute	NA	Gasoline	16	NA	76	on		40	1280	25.7	3781.9					Worker Vehicles
210	S-14	Excavate Trench	Worker Commute	NA	Gasoline	9	NA	201	on		40	720	25.7	5626.2					Worker Vehicles
211	S-15	Duct Bank & Conduit Installation	Worker Commute	NA	Gasoline	7	NA	199	on		40	560	25.7	4332.4					Worker Vehicles
212	S-16	Cable Installation	Worker Commute	NA	Gasoline	6	NA	227	on		40	480	25.7	4235.9					Worker Vehicles
213	S-17	Paving	Worker Commute	NA	Gasoline	8	NA	201	on		40	640	25.7	5001.0					Worker Vehicles
214	S-18	Site Preparation	Worker Commute	NA	Gasoline	8	NA	78	on		40	640	25.7	1940.7					Worker Vehicles
215	S-19	Below-Grade Construction	Worker Commute	NA	Gasoline	21	NA	300	on		40	1680	25.7	19593.6					Worker Vehicles
216	S-20	Above-Grade Construction	Worker Commute	NA	Gasoline	22	NA	903	on		40	1760	25.7	61785.1					Worker Vehicles
217	S-21	Commissioning and Testing	Worker Commute	NA	Gasoline	7	NA	253	on		40	560	25.7	5508.0					Worker Vehicles
218	S-22	Site & ROW Restoration (overhead)	Worker Commute	NA	Gasoline	10	NA	127	on		40	800	25.7	3949.8					Worker Vehicles
219	S-23	Site & ROW Restoration (underground)	Worker Commute	NA	Gasoline	9	NA	98	on		40	720	25.7	2743.1					Worker Vehicles

Table 4: Fuel Consumption Summary

Vehicle Type	Gasoline	Diesel	Jet A
Worker Vehicles	212,864	-	-
Construction Vehicles	20,499	131,483	-
Construction Equipment	-	810,050	-
Helicopter and Support	-	-	30,558
Total	**233,363**	**941,533**	**30,558**

Note: All values in gallons

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3.8 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

This section describes the existing conditions for geology, soils, and paleontological resources in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.8.1 Environmental Setting

3.8.1.1 Regional Geology

The Proposed Project would be located in the Peninsular Ranges Geomorphic Province. The Peninsular Ranges Geomorphic Province consists of a series of ranges separated by northwest-trending valleys, subparallel to faults extending from the San Andreas Fault. The Peninsular Ranges extend into lower California and are bound to the east by the Colorado Desert and to the west by the Pacific Ocean. The geology of the Peninsular Ranges Geomorphic Province is characterized by granitic rock intruding older metamorphic rocks (California Department of Conservation [DOC] 2002a).

Within the Peninsular Ranges Geomorphic Province, San Diego County can be divided into three distinct geographic regions from west to east: the Coastal Plain, the Peninsular Ranges, and the Desert Basin (Salton Trough) (County of San Diego 2011a). The Proposed Project would be located in the Peninsular Ranges region.

3.8.1.1.1 Peninsular Ranges

The Peninsular Ranges region in San Diego County consists of foothills and mountains that span elevations from 600 to 6,000 feet above mean sea level (AMSL). The lower Peninsular Ranges region is characterized by rolling to hilly uplands that contain frequent narrow, winding valleys. This area is traversed by several rivers and intermittent drainages. The higher Peninsular Ranges region is dominated by steep mountains that are typically covered with granitic boulders and chaparral vegetation on the western slopes, evergreen and temperate forests at and near the mountaintops, and desert chaparral on the eastern slopes.

The Peninsular Ranges region is primarily underlain by plutonic igneous rocks that formed from the cooling of molten magmas deep within the earth's crust. These magmas were generated during subduction of an oceanic crustal plate that was converging on the North American Plate between 120 million and 90 million years ago. Over this long period of time, extensive masses of plutonic rocks accumulated within the crust. Intense heat associated with these plutonic intrusions metamorphosed the ancient sedimentary rocks that were already there. These metasediments are now preserved in the Peninsular Ranges region as marble, slate, schist, quartzite, and gneiss. Younger under-formed sedimentary rocks occur in various areas of the Peninsular Ranges region. The Peninsular Ranges region contains Quaternary alluvial and alluvial fan deposits in many of the mountain valleys. Some of the more southern mountain valleys contain Quaternary peat deposits (County of San Diego 2011a).

3.8.1.2 Local Geology

The Proposed Project would be underlain by the following four geologic units:

- Young alluvium and colluvium (Qc, Qya),
- Intrusive igneous rocks (Ka, Kc, Kcm, Kcp, Kgr, Kjv, Klb), and
- Metasedimentary and metavolcanic rocks (JTRm, KJvs, Kmv).

Geologic units that would be crossed by the Proposed Project are shown in Figure 3.8-1: Geologic Units Crossed by the Proposed Project and discussed further in Attachment 3.8-A: Paleontological Resources Technical Report. The following subsections describe each geologic unit crossed by the Proposed Project.

3.8.1.2.1 Young alluvium and colluvium (Qc, Qya)

Four short segments of the proposed 230 kV overhead (OH) segment would be underlain by Holocene-age (i.e., less than 11,700 years old) young alluvium, with one proposed pole located in an area underlain at the surface by young alluvium. Holocene-age colluvium is mapped as underlying the proposed Swat Staging Yard and proposed Lyons Valley Staging/Fly Yard. Alluvial deposits are found within and along the margins of active or recent washes and streams. Colluvial deposits are generally found at local topographic low points and are the result of the weathering of steep slopes. Both these deposits generally consist of poorly consolidated clays, silts, sands, and gravels. Young and recent surficial deposits range from slightly consolidated to unconsolidated.

3.8.1.2.2 Intrusive igneous rocks (Ka, Kc, Kcm, Kcp, Kgr, Kjv, Klb)

The majority of the proposed 230 kV OH segment, entirety of the proposed 230 kV underground (UG) segment, the existing Suncrest Substation, the proposed Hospital Staging Yard, the proposed Greenfield Staging Yard, and the proposed Sweetwater Staging/Fly Yard would be underlain by a variety of crystalline basement rocks, including Tonalite of Alpine (Ka), Cuyamaca Gabbro (Kc), Corte Madera Monzogranite (Kcm), Chiquito Peak Monzogranite (Kcp), undivided granitoid rocks (Kgr), Japatul Valley Tonalite (Kjv), and Tonalite of Las Bancas (Klb) (Todd 2004). Batholithic rocks in San Diego County range in composition from granite to gabbro, which primarily formed during the Cretaceous Period starting around 125 million years ago and extending to about 85 million years ago (Todd 2004, Hildebrand and Whalen 2014, Walawender 2022). These plutonic igneous rocks formed in a major subduction zone off the west coast of the North American continent during the Mesozoic. Oceanic crust was subducted below continental crust, and as the cold, water-saturated oceanic crust descended into the earth's mantle, it became superheated and melted into buoyant magma bodies called plutons, which then rose (intruded) through the overlying crust and slowly cooled several miles below the earth's surface to form the plutonic igneous rocks (gabbro, granite, granodiorite, diorite, and tonalite) now exposed at the surface along portions of the Proposed Project alignment.

3.8.1.2.3 Metasedimentary and metavolcanic rocks (JTRm, KJvs, Kmv)

A very small portion of the proposed 230 kV OH segment, proposed High Glen Staging Yard, and proposed High Glen Fly Yard would be underlain by pre-batholithic metamorphic rock units, including Cretaceous-age metavolcanic rocks (Kmv).

Figure 3.8-1:
Geologic Units
Crossed by the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation

Geologic Map Units

- Kmv - Metavolcanic rocks
- Klb - Tonalite of Las Bancas
- KJvs - Metavolcanic and metasedimentary rocks
- Ka - Tonalite of Alpine
- Kcp - Chiquito Peak Monzogranite
- Kjv - Japatul Valley Tonalite
- Kgr - Granitoid rocks
- Kcm - Corte Madera Monzogranite
- Qc - Colluvium
- Qya - Young alluvium

1:80,000
0 1 2 Miles

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The eastern end of the proposed 230 kV OH segment and proposed eastern 230 kV UG segment would be underlain by Jurassic- to Cretaceous-age metavolcanic and metasedimentary rocks (KJvs). The southeastern portion of the existing Suncrest Substation is also underlain by Jurassic- to Cretaceous-age metavolcanic and metasedimentary rocks (KJvs) and Triassic- to Jurassic-age metavolcanic and metasedimentary rocks (JTRm). In this part of San Diego County, metamorphic rocks are preserved as roof pendants within the younger intrusive igneous rocks of the Peninsular Ranges Batholith. The sedimentary protolith and original depositional environment of the metasedimentary rocks has been described as marine sandstones and shales deposited within or in close association with a submarine fan (Germinario 1993).

3.8.1.3 Topography

SDG&E's existing Suncrest Substation is located at an elevation of 3,057 feet AMSL. The proposed western 230 kV UG segment would be located on land ranging in elevation from 1,081 feet AMSL to 1,625 feet AMSL. The proposed eastern 230 kV UG segment would be located on land ranging in elevation from 2,950 feet AMSL to 3,057 feet AMSL. The proposed 230 kV OH segment would be located on land ranging in elevation from 749 feet AMSL to 2,955 feet AMSL. The topography in the Proposed Project Area is relatively steep, with slopes ranging from 0 to 108 percent and averaging greater than 31 percent.

3.8.1.4 Geologic Hazards

Typical geologic hazards include earthquakes, liquefaction, landslides, and subsidence. The potential hazards that exist in the vicinity of the Proposed Project are discussed in the following subsections.

3.8.1.4.1 Faulting and Seismicity

A fault is a fracture or zone of fractures between two blocks of rock that allow the blocks to move relative to each other. During an earthquake, the rock on one side of the fault suddenly slips with respect to the other (United States [U.S.] Geologic Survey [USGS] 2025a). Active faults have had surface displacement within the Holocene epoch (11,000 years ago to present), potentially active faults have had surface displacement of Quaternary age deposits (1.6 million years ago to present), and inactive faults have had no displacement in the past 1.6 million years.

The Proposed Project alignment would not cross any active faults and would not be located within an Alquist-Priolo earthquake fault zone as described in Section 3.8.2.2.1 Alquist-Priolo Earthquake Fault Zoning Act. One unnamed fault is located approximately 2.8 miles northeast of the existing Suncrest Substation, as shown in Figure 3.8-2: Active or Potentially Active Faults Located within 10 Miles of the Proposed Project. The age of the unnamed fault is undifferentiated Quaternary (i.e., active in the past 1.6 million years) and is a potentially active fault as a result. The slip rate[1] and maximum moment magnitude (Mmax)[2] of the unnamed fault

[1] The slip rate is the rate at which one side of a fault slides past the other side. Faults with higher slip rates tend to have more frequent earthquakes (California DOC 2025a).

[2] The Mmax of a fault is the maximum magnitude earthquake that a fault is likely to suffer (Statewide California Earthquake Center 1997).

is undocumented. No other active or potentially active faults would be located within 10 miles of the Proposed Project (USGS 2025b).

Other active faults in San Diego County include the Elsinore, San Jacinto, and Rose Canyon faults. The Julian section of the Elsinore Fault (approximately 18.8 miles northeast of the existing Suncrest Substation) has a slip rate of 5 millimeters per year (mm/yr) and Mmax of 7.1. The Borrego Mountain section of the San Jacinto Fault (approximately 40.7 miles northeast of the existing Suncrest Substation) has a slip rate of 4 mm/yr and Mmax of 6.6. The Rose Canyon Fault (approximately 17.2 miles west of the westernmost section of the Proposed Project alignment) has a slip rate of 1.5 mm/yr and Mmax of 7.2 (California DOC 2002b, 2002c).

3.8.1.4.2 Liquefaction

Liquefaction occurs when loosely packed, water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking (USGS 2023a). Liquefaction causes the ground to lose its stability and move or collapse, which can cause severe damage to buildings and structures and pose a threat to occupants.

The Proposed Project would cross a County of San Diego (County) -designated liquefaction area between proposed Poles 31 and 32, as shown in Figure 3.8-3: Liquefaction Areas within 1 Mile of the Proposed Project. In addition, proposed Poles 3 and 4 would be approximately 0.3 mile north and 0.4 mile north, respectively, of County-designated liquefaction areas. The existing Suncrest Substation is approximately 0.75 mile south of a County-designated liquefaction area (County of San Diego 2011a). The proposed staging and fly yards would not be located on any County-designated liquefaction areas. The Proposed Project would not cross any liquefaction areas designated by the California DOC (California DOC 2025b).

3.8.1.5 Subsidence

Land subsidence is the sinking or collapsing of soil at or near the earth's surface that may occur naturally or result from excessive groundwater pumping, drainage of organic soils, or underground mining (USGS 2019). Seismic activity increases the potential for land subsidence to occur.

Because the underlying geologic formations in San Diego County are mostly granitic, the Proposed Project Area has a very low potential for subsidence (County of San Diego 2011a). In addition, the U.S. Department of Agriculture (USDA) Soil Survey Geographic Database (SSURGO) does not identify any areas of subsidence in the location of the Proposed Project (USDA 2017a).

3.8.1.5.1 Landslides

A landslide is the movement of a mass of rock, debris, or earth down a slope; it can be caused by rainfall, snowmelt, changes in water level, stream erosion, changes in groundwater, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors (USGS 2023b).

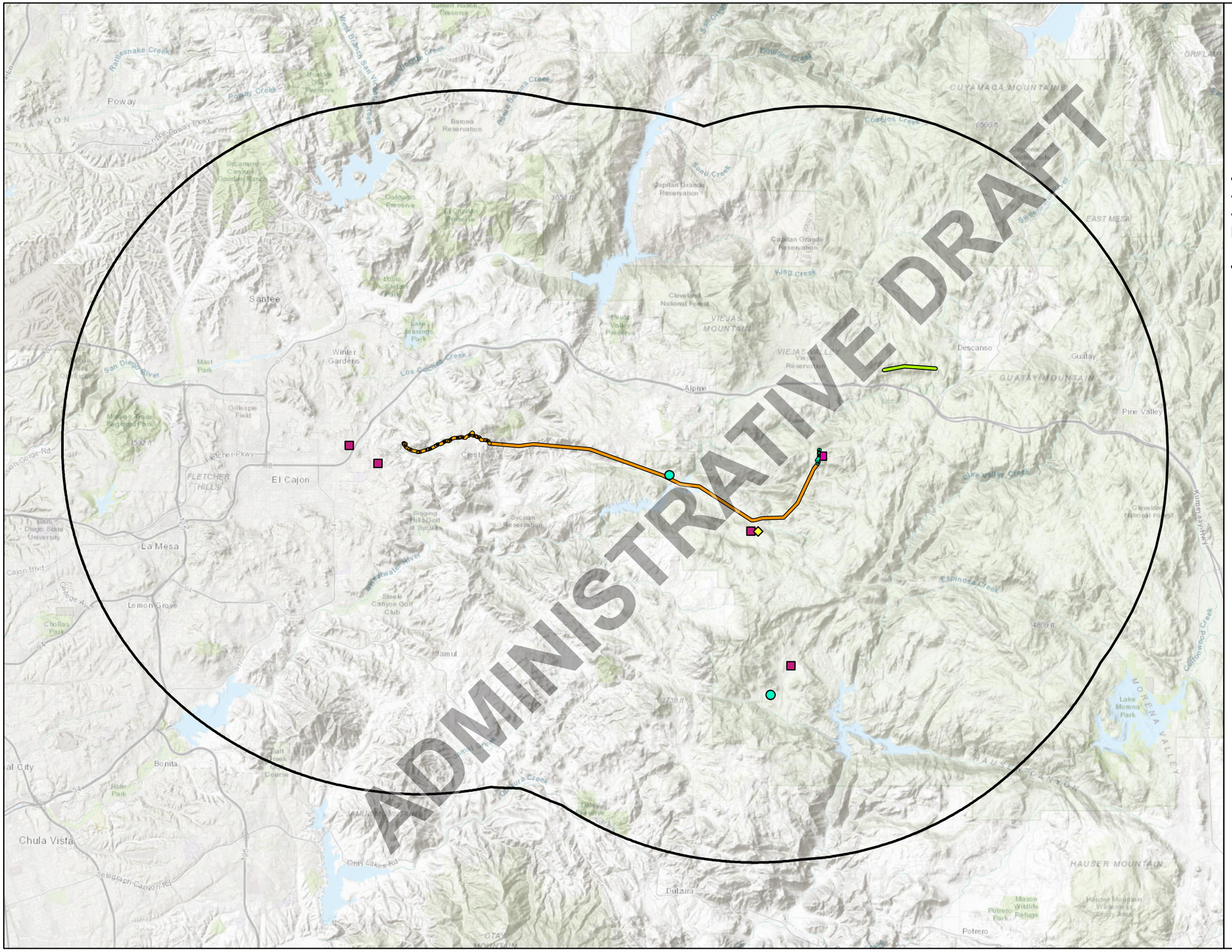

Figure 3.8-2:
Active or Potentially Active Faults Located within 10 Miles of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Existing Suncrest Substation
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- 10-Mile Buffer

Faults

- Unnamed Fault (Undifferentiated Quaternary)

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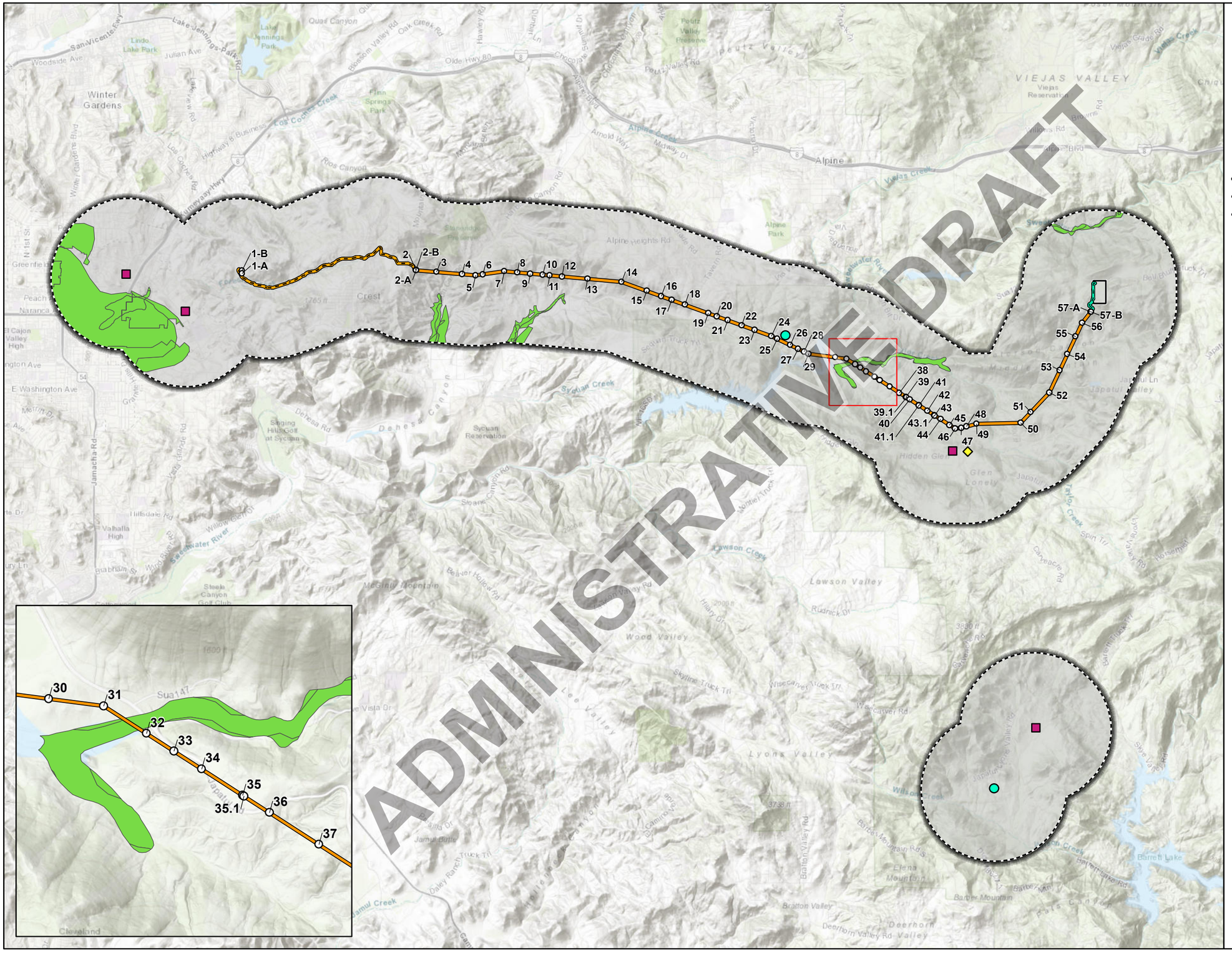

Figure 3.8-3:
Liquefaction Areas within
1 Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Pole
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer
- Potential Liquefaction

1:85,000

0 1 2 Miles

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The Proposed Project would cross slopes as steep as 108 percent (i.e., a 47-degree angle). Based on the USGS's landslide inventory and susceptibility database (USGS 2025c), the Proposed Project would cross numerous areas mapped by USGS as having high and very high landslide potential, as shown in Figure 3.8-4: Landslide Potential within 1 Mile of the Proposed Project. Approximately 1.6 miles (52 percent) of the proposed western 230 kV UG segment would cross areas with high to very high landslide potential. Approximately 0.1 mile (20 percent) of the proposed eastern 230 kV UG segment would cross areas with high to very high landslide potential. Poles 1 through 29, 33, 37 through 47, and 49 through 57 of the proposed 230 kV OH segment would be located on land with high to very high landslide potential. Portions of the proposed High Glen Staging Yard and proposed High Glen Fly Yard would be located on land with moderate to high landslide potential. The proposed Lyons Valley Staging/Fly Yard would be located on land with moderate landslide potential. The proposed Hospital Staging Yard, proposed Greenfield Staging Yard, proposed Sweetwater Staging/Fly Yard, and proposed Swat Staging Yard would not be located on land with high landslide potential.

3.8.1.6 Soil Conditions

The Proposed Project would cross multiple soil types, as mapped by the Natural Resources Conservation Service (NRCS) and depicted in the Web Soil Survey (NRCS 2019). Each soil type that is crossed by the Proposed Project is also listed in Table 3.8-1: Mapped Soil Units and Soil Properties Crossed by the Proposed Project and shown in Figure 3.8-5: Soils Crossed by the Proposed Project. The proposed western 230 kV UG segment would cross the following dominant soil types:

- Cieneba-Fallbrook rocky sandy loams, eroded (CnE2) (29 percent);
- Fallbrook sandy loam, eroded (FaD2) (22 percent); and
- Fallbrook rocky sandy loam, eroded (FeE2) (16 percent).

The proposed 230 kV OH segment would cross the following dominant soil types:

- Cieneba-Rock outcrop complex, very stony (CmrG) (29 percent); and
- Vista rocky coarse sandy loam (VvG) (20 percent).

The proposed eastern 230 kV UG segment would cross the following dominant soil types:

- Cieneba-Rock outcrop complex, very stony (CmrG) (66 percent); and
- Fallbrook rocky sandy loam (FeE) (28 percent).

Table 3.8-1: Mapped Soil Units and Soil Properties Crossed by the Proposed Project also documents selected soil properties, including hydrologic group, wind erodibility, and soil erodibility, which are discussed in the subsections that follow.

Table 3.8-1: Mapped Soil Units and Soil Properties Crossed by the Proposed Project

USDA Map Unit Symbol[3]	National Map Unit Symbol	Map Unit Name	Hydrologic Group	Wind Erodibility Index (T/Ac/Yr)[4]	Soil Erodibility Factor (K)[5]	Slope Percent Range	Approximate Percent Crossed by the Proposed Project[6]	Stability Concerns[7]
Proposed western 230 kV UG Segment								
VsD2	hbhb	Vista coarse sandy loam, eroded	B	86	0.26	9 to 15	6	Moderate runoff potential, moderately susceptible to wind erosion, moderate erosion potential
CmrG	2zwsb	Cieneba-Rock outcrop complex, very stony	D	86	0.43	30 to 75	7	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
CnE2	hb9w	Cieneba-Fallbrook rocky sandy loams, eroded	D	86	0.27	9 to 30	29	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FeE2	hbc0	Fallbrook rocky sandy loam, eroded	C	86	0.25	9 to 30	16	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
RaD2	hbfv	Ramona sandy loam, eroded	C	86	0.29	9 to 15	5	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FaE2	hbbw	Fallbrook sandy loam, eroded	C	86	0.25	15 to 30	8	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FaD2	hbbv	Fallbrook sandy loam, eroded	C	86	0.35	9 to 15	22	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential

[3] USDA map unit symbols are shown in Figure 3.8-5: Soils Crossed by the Proposed Project.
[4] T/Ac/Yr = mass in tons of soil moved per unit area (acre) per year.
[5] The soil erodibility factor (K) is discussed further in Section 3.8.1.6.2 Wind Erodibility.
[6] Due to rounding, totals may not equal 100 percent.
[7] The stability concerns are determined by hydrologic groups, wind erodibility index values, and soil erodibility factors.

USDA Map Unit Symbol[3]	National Map Unit Symbol	Map Unit Name	Hydrologic Group	Wind Erodibility Index (T/Ac/Yr)[4]	Soil Erodibility Factor (K)[5]	Slope Percent Range	Approximate Percent Crossed by the Proposed Project[6]	Stability Concerns[7]
VvG	hbhj	Vista rocky coarse sandy loam	B	86	0.26	30 to 65	8	Moderate runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Proposed 230 kV OH Segment								
VvG	hbhj	Vista rocky coarse sandy loam	B	86	0.26	30 to 65	20	Moderate runoff potential, moderately susceptible to wind erosion, moderate erosion potential
VsG	2xgtm	Vista coarse sandy loam, MLRA 20	B	86	0.26	30 to 65	5	Moderate runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FvE	hbc2	Fallbrook-Vista sandy loams	C	86	0.34	15 to 30	10	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
VaC	2zwrw	Visalia sandy loam	A	86	0.33	5 to 9	1	Low runoff potential, moderately susceptible to wind erosion, moderate erosion potential
CmrG	2zwsb	Cieneba-Rock outcrop complex, very stony	D	86	0.43	30 to 75	29	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FeE	hbbz	Fallbrook rocky sandy loam	C	86	0.26	9 to 30	7	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Rm	2zwsk	Riverwash	A	220	0.02	0 to 4	1	Low runoff potential, very susceptible to wind erosion, low erosion potential
RaD2	hbfv	Ramona sandy loam, eroded	C	86	0.29	9 to 15	8	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
CIG2	hb9s	Cieneba coarse sandy loam, eroded	D	86	0.24	30 to 65	4	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential

USDA Map Unit Symbol[3]	National Map Unit Symbol	Map Unit Name	Hydrologic Group	Wind Erodibility Index (T/Ac/Yr)[4]	Soil Erodibility Factor (K)[5]	Slope Percent Range	Approximate Percent Crossed by the Proposed Project[6]	Stability Concerns[7]
VvE	hbhh	Vista rocky coarse sandy loam	B	86	0.26	15 to 30	<1	Moderate runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FaD2	hbbv	Fallbrook sandy loam, eroded	C	86	0.35	9 to 15	2	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
CnG2	hb9x	Cieneba-Fallbrook rocky sandy loams, eroded	D	86	0.27	30 to 65	3	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
AcG	2zwsj	Acid igneous rock land	Not Applicable (NA)	NA	NA	7 to 75	5	Very high runoff potential
FvD	hbc1	Fallbrook-Vista sandy loams	C	86	0.33	9 to 15	4	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
W	NA	Water	NA	NA	NA	NA	1	None
Proposed eastern 230 kV UG Segment								
CmrG	2zwsb	Cieneba-Rock outcrop complex, very stony	D	86	0.43	30 to 75	66	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FeE	hbbz	Fallbrook rocky sandy loam	C	86	0.26	9 to 30	28	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
ClG2	hb9s	Cieneba coarse sandy loam, eroded	D	86	0.24	30 to 65	7	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential

USDA Map Unit Symbol[3]	National Map Unit Symbol	Map Unit Name	Hydrologic Group	Wind Erodibility Index (T/Ac/Yr)[4]	Soil Erodibility Factor (K)[5]	Slope Percent Range	Approximate Percent Crossed by the Proposed Project[6]	Stability Concerns[7]
Proposed Hospital Staging Yard								
Pfc	hbfn	Placentia sandy loam, thick surface	D	86	0.28	2 to 9	100	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Proposed Greenfield Staging Yard								
VaC	2zwrw	Visalia sandy loam	A	86	0.33	5 to 9	82	Low runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Pfc	hbfn	Placentia sandy loam, thick surface	D	86	0.28	2 to 9	18	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Proposed Sweetwater Staging/Fly Yard								
RaD2	hbfv	Ramona sandy loam, eroded	C	86	0.29	9 to 15	78	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FeE	hbbz	Fallbrook rocky sandy loam	C	86	0.26	9 to 30	22	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Proposed High Glen Staging Yard								
FeE	hbbz	Fallbrook rocky sandy loam	C	86	0.26	9 to 30	100	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FaC	hbbs	Fallbrook sandy loam, 5 to 9 percent slopes	C	86	0.35	5 to 9	< 1	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Proposed High Glen Fly Yard								
FeE	hbbz	Fallbrook rocky sandy loam	C	86	0.26	9 to 30	100	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential

USDA Map Unit Symbol[3]	National Map Unit Symbol	Map Unit Name	Hydrologic Group	Wind Erodibility Index (T/Ac/Yr)[4]	Soil Erodibility Factor (K)[5]	Slope Percent Range	Approximate Percent Crossed by the Proposed Project[6]	Stability Concerns[7]
Proposed Swat Staging Yard								
FaD2	hbbv	Fallbrook sandy loam, eroded	C	86	0.35	9 to 15	100	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Proposed Lyons Valley Staging/Fly Yard								
FaE2	hbbw	Fallbrook sandy loam, eroded	C	86	0.25	15 to 30	100	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
Existing Suncrest Substation								
CmrG	2zwsb	Cieneba-Rock outcrop complex, very stony	D	86	0.43	30 to 75	37	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential
FeE	hbbz	Fallbrook rocky sandy loam	C	86	0.26	9 to 30	52	High runoff potential, moderately susceptible to wind erosion, moderate erosion potential
CIG2	hb9s	Cieneba coarse sandy loam, eroded	D	86	0.24	30 to 65	11	Very high runoff potential, moderately susceptible to wind erosion, moderate erosion potential

Sources: NRCS 2019; USDA 2002a, 2002b, 2017b

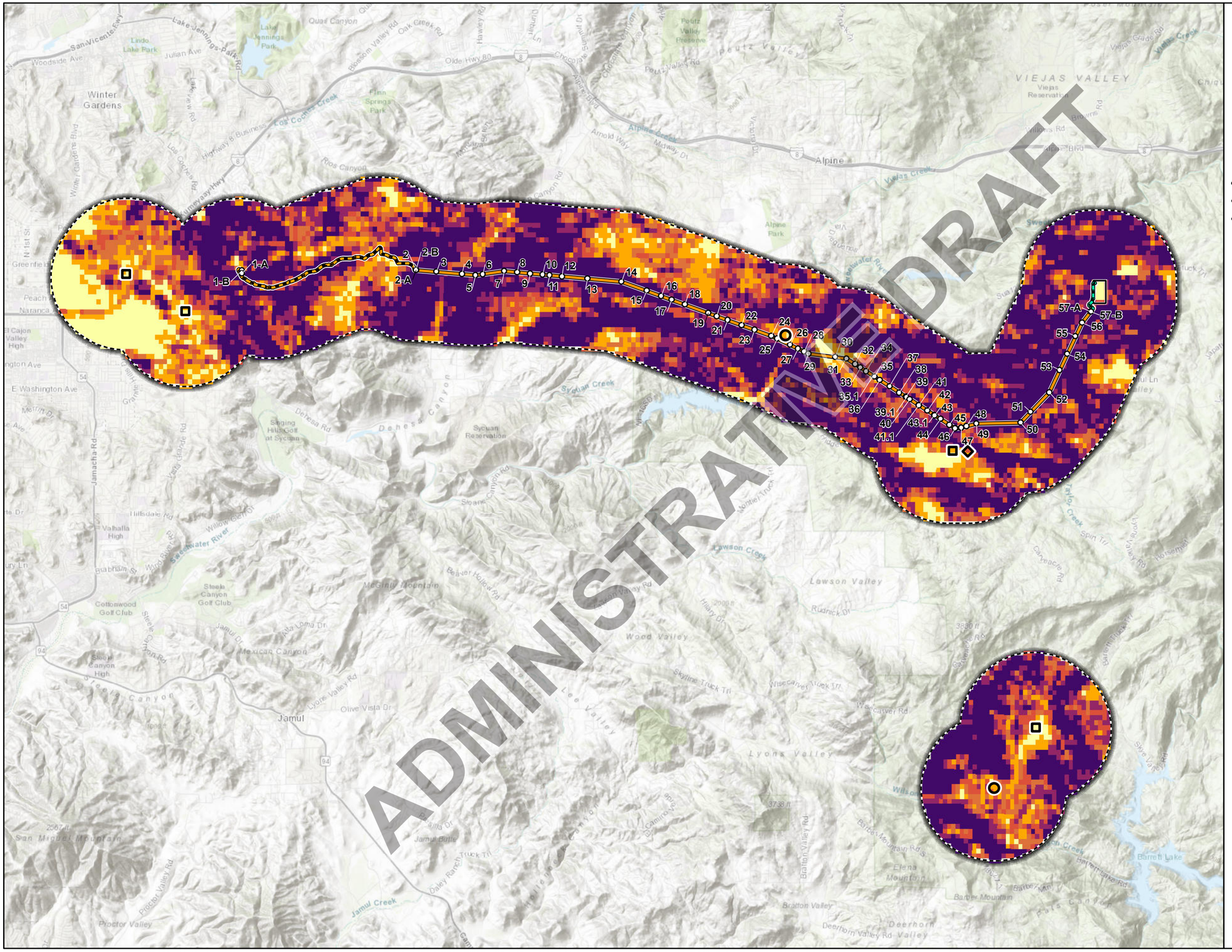

Figure 3.8-4:
Landslide Potential within
1 Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Pole
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer

Landslide Susceptibility

- Very Low
- Very High

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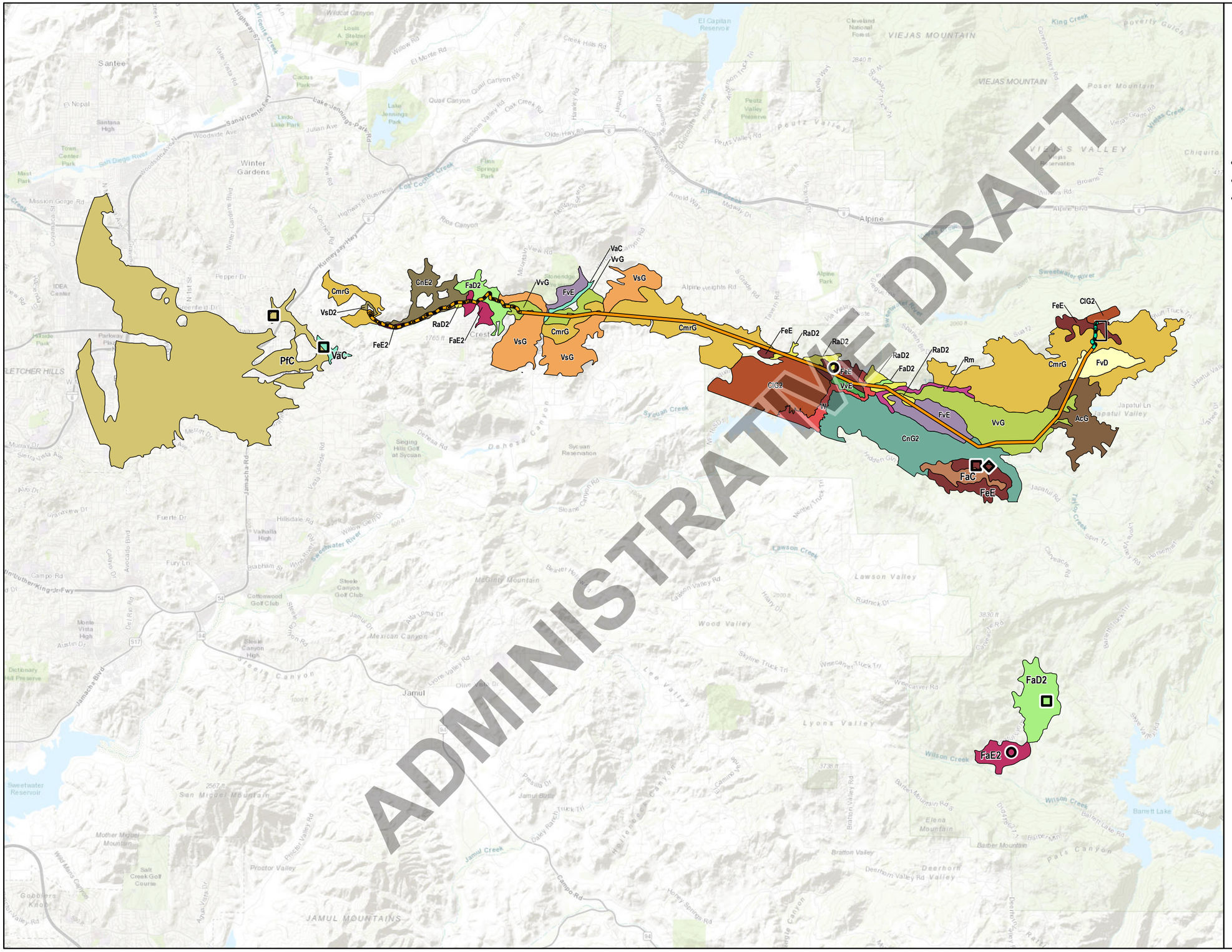

Figure 3.8-5:
Soils Crossed by the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation

Soil Types

AcG	FvE
ClG2	PfC
CmrG	RaD2
CnE2	RfF
CnG2	Rm
FaC	VaC
FaD2	VsD2
FaE2	VsG
FeE	VvE
FeE2	VvG
FvD	W

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3.8.1.6.1 Hydrologic Group

The hydrologic group classification is a measure of runoff potential determined by a soils infiltration rate, which is the rate at which water enters the soil at the surface (USDA 2002a). Soils are classified into Group A, B, C, or D. These classification groups are summarized in Table 3.8-2: Hydrologic Groups Crossed by the Proposed Project. The hydrologic group, along with other soil factors, can give an indication or estimation of the runoff potential.

Table 3.8-2: Hydrologic Groups Crossed by the Proposed Project

Hydrologic Group	Infiltration Rates	Description
A	High	These soils have the lowest runoff potentials and typically consist of deep, well-drained to excessively drained sands or gravels.
B	Moderate	These soils consist of deep, moderately well- or well-drained soils with moderately fine to moderately coarse textures.
C	Slow	These soils have a layer that impedes the downward movement of water, or moderately fine or fine textures.
D	Very Slow	These soils consist of clayey soils with high swelling potential, soils with a high permanent water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious materials.

Source: USDA 2002a

As shown in Table 3.8-1: Mapped Soil Units and Soil Properties Crossed by the Proposed Project, the Proposed Project would cross numerous soils in Hydrologic Groups C and D, which means the Proposed Project would be on soils with high and very high runoff potential.

3.8.1.6.2 Wind Erodibility

According to the USDA, soil erodibility by wind is directly related to the percentage of dry non-erodible surface soil aggregates larger than 0.84 millimeter in diameter (USDA 2002b). The soil erodibility index ranges from 0 to 310, with higher values having greater susceptibility to wind erosion. Soils consisting of very fine, dry sand have the highest wind erodibility index, and soils consisting of wet or coarse fragments have the lowest wind erodibility index. As summarized in Table 3.8-1: Mapped Soil Units and Soil Properties Crossed by the Proposed Project, most soils crossed by the Proposed Project would have an approximate wind erodibility index of 86, which means the soils in the area are moderately susceptible to wind erosion. Between proposed Poles 31 and 32, the Proposed Project would cross one soil designation (Riverwash) that has an approximate wind erodibility index of 220, which means the soil is very susceptible to wind erosion.

3.8.1.6.3 Soil Erodibility

As defined by the State Water Resources Control Board (SWRCB), the soil erodibility factor (K) represents the following:

- the susceptibility of soil or surface material to erosion;
- the transportability of the sediment; and

- the amount and rate of runoff given a particular rainfall input, as measured under a standard condition (SWRCB 2023).

The higher the K value, the more susceptible a soil type is to erosion. As summarized in Table 3.8-1: Mapped Soil Units and Soil Properties Crossed by the Proposed Project, most soils crossed by the Proposed Project would have a K value between 0.24 and 0.43, which means the soils have moderate erosion potential. Between proposed Poles 31 and 32, the Proposed Project would cross one soil designation (Riverwash) with a K value of 0.02, which means the soil has a low erosion potential.

3.8.1.7 Paleontological Resources

The San Diego Natural History Museum's (SDNHM's) Department of PaleoServices (DPS) prepared a Paleontological Resources Technical Report (PRTR) for the Proposed Project, which is included as Attachment 3.8-A: Paleontological Resources Technical Report (SDNHM 2026). The PRTR included a review of relevant published and unpublished geologic reports, peer-reviewed paleontological publications, unpublished paleontological reports and theses, and museum paleontological locality data (SDNHM 2006).

The paleontological records search found that the San Diego Society of Natural History, which runs and operates the SDNHM, does not have any documented fossil collection localities within a 1-mile radius of the Proposed Project's proposed 230 kV OH segment, proposed 230 kV UG segments, or existing Suncrest Substation.

As described in Section 3.8.1.2 Local Geology, the Proposed Project would be underlain by Young alluvium and colluvium (Qc, Qya), Intrusive igneous rocks (Ka, Kc, Kcm, Kcp, Kgr, Kjv, Klb), and Metasedimentary and metavolcanic rocks (JTRm, KJvs, Kmv). As summarized in Table 3.8-3: Paleontological Resource Potential of Geologic Units Crossed by the Proposed Project and shown in Figure 3.8-6: Paleontological Resource Potential within 1 Mile of the Proposed Project, the proposed 230 kV UG segments and proposed 230 kV OH segment would cross geologic units with low and very low potential for paleontological resources. The existing Suncrest Substation is located on geologic units with very low potential for paleontological resources.

3.8.2 Regulatory Setting

3.8.2.1 Federal

3.8.2.1.1 National Earthquake Hazards Reduction Act of 1977

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) created the National Earthquake Hazards Reduction Program (NEHRP), establishing a long-term earthquake risk reduction program to better understand, predict, and mitigate risks associated with seismic events. Four federal agencies are responsible for coordinating activities under NEHRP: the USGS, National Science Foundation, Federal Emergency Management Agency (FEMA), and National Institute of Standards and Technology. Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction.

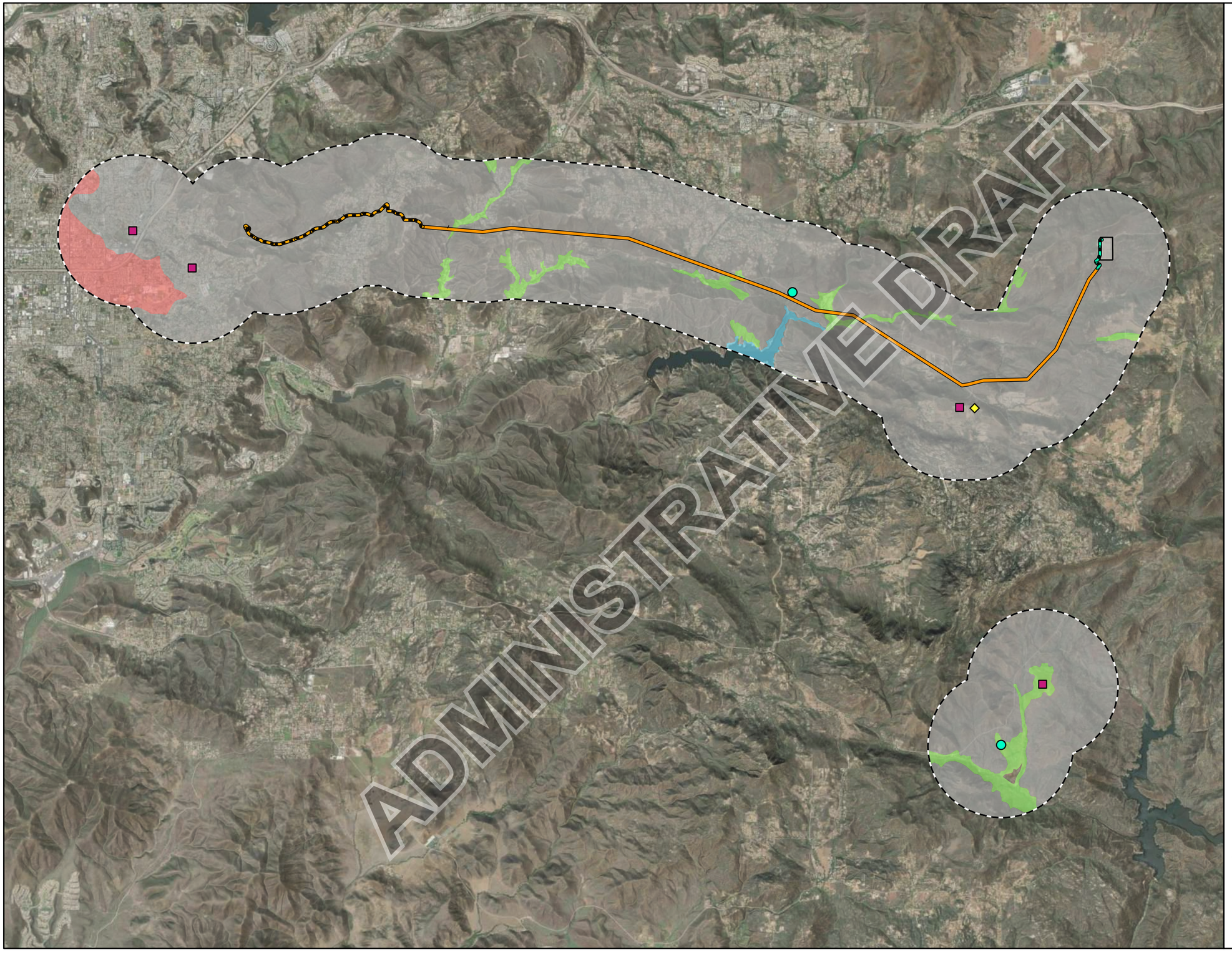

Figure 3.8-6:
Paleontological Resource Potential
within **1** Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer

Paleontological Resource Potential Rating

- Water body
- Very low
- Low
- Moderate
- High

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0 1 2 Miles

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Table 3.8-3: Paleontological Resource Potential of Geologic Units Crossed by the Proposed Project

Geologic Unit	Age	Proposed Project Component that would Cross	Paleontological Resource Potential
Young alluvium and colluvium (Qc, Qya)	Holocene	Proposed 230 kV OH segment, proposed Swat Staging Yard, proposed Lyons Valley Staging/Fly Yard	Low
Intrusive igneous rocks (Ka, Kc, Kcm, Kcp, Kgr, Kjv, Klb)	Cretaceous	Proposed 230 kV western UG segment, proposed 230 kV OH segment, proposed Hospital Staging Yard, proposed Greenfield Staging Yard, proposed Sweetwater Staging/Fly Yard, existing Suncrest Substation	Very Low
Metasedimentary and metavolcanic rocks (JTRm, KJvs, Kmv)	Triassic to Cretaceous	Proposed 230 kV OH segment, proposed eastern 230 kV UG segment, proposed High Glen Staging Yard, proposed High Glen Fly Yard, existing Suncrest Substation	Very Low

Source: DPS 2026

The current program objectives (FEMA 2023) are as follows:

- advance the understanding of earthquake processes and their consequences;
- enhance existing and develop new information, tools, and practices for protecting the nation from earthquake consequences;
- promote the dissemination of knowledge and implementation of tools, practices, and policies that enhance strategies to withstand, respond to, and recover from earthquakes; and
- learn from post-earthquake investigations to enhance the effectiveness of available information, tools, practices, and policies to improve earthquake resilience.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

3.8.2.1.2 Paleontological Resources Preservation Act of 2009

The Paleontological Resources Preservation Act (PRPA) of 2009 is the first statute to directly address the management and protection of paleontological resources on federal lands. This law essentially codifies collecting policies of federal land management agencies. It allows reasonable amounts of common invertebrate and plant fossils to be casually collected with negligible disturbance. In addition, it requires protection and preservation of uncommon invertebrate plants and all vertebrate fossils, including imprints, molds, casts, etc. The PRPA further describes requirements for permitting collection on federal lands, stipulations regarding the use of paleontological resources in education, continued federal ownership of recovered paleontological resources, and standards for acceptable repositories of collected specimens and associated data.

The PRPA also provides for criminal and civil penalties for unauthorized removal of paleontological resources from federal lands.

3.8.2.1.3 Title 36 Code of Federal Regulations Part 291

The USDA adopted Title 36 Code of Federal Regulations Part 291 in April 2015 to manage, protect, and preserve paleontological resources on National Forest System lands. These regulations provide for management of paleontological resources by establishing fossil collection permitting procedures, setting curation standards, establishing civil and criminal penalties, prohibiting fossil collection for commercial purposes, and developing procedures for allowing the casual collection of some of these resources on certain lands and under specific conditions.

3.8.2.2 State

3.8.2.2.1 Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was enacted by the state in 1972 to mitigate the hazards of surface faulting on structures planned for human occupancy and other critical structures. The state has established regulatory zones, known as earthquake fault zones, around the surface traces of active faults. Earthquake fault zone maps have been issued for use by government agencies to plan and review new construction projects. In addition to residential projects, structures planned for human occupancy that are associated with industrial and commercial projects are also a concern near the Alquist-Priolo earthquake fault zones.

3.8.2.2.2 California Building Code

The Proposed Project is subject to the applicable sections of Title 24, Part 2 of the California Building Code (CBC), which is administered by the California Building Standards Commission. Under state law, all building standards must be centralized in Title 24 to be enforceable. The CBC contains necessary California amendments, which are based on American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) Standards. The ASCE/SEI Standards provide requirements for general structural design and include means for determining earthquake loads, as well as other loads for inclusion into building codes. The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, which are used to determine a seismic design category (SDC) for a project. Once a project is categorized according to an SDC, design specifications can be determined. In addition, Chapter 18 of the CBC includes the requirements for site preparation for receiving a foundation, including the load-bearing values for soils and protection for the foundation from frost and water intrusion. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure—or any appurtenances connected or attached to such buildings or structures—throughout California (International Code Council [ICC] 2025).

3.8.2.2.3 California Public Resources Code Section 5097.5

Section 5097.5 of the Public Resources Code (PRC) states the following:

> "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency,

> or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor."

As used in this PRC section, "public lands" means lands owned by, or under the jurisdiction of, the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, public agencies are required to comply with PRC Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

3.8.2.2.4 California Public Resources Code Section 30244

Section 30244 of the PRC states the following:

> "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

3.8.2.2.5 California Public Utilities Commission General Order 95

California Public Utilities Commission (CPUC) General Order (GO) 95 Rules for Overhead Line Construction provides general standards to ensure the safety of those engaged in the construction and O&M of overhead electric transmission lines and to the public in general. CPUC GO 95 Rule 48.2 requires the strength of steel structures and components for tubular steel pole structures to be designed using American Society of Civil Engineers 48-11 (CPUC 2024).

3.8.2.2.6 California Public Resources Code Section 21000 et seq.

The California Environmental Quality Act (CEQA) (PRC Section 21000 et seq.) protects paleontological resources on both public and private lands in California. This act requires the identification of environmental impacts of a project, the determination of significance of the impacts, and the identification of alternative and/or mitigation measures to reduce adverse environmental impacts. The Guidelines for the Implementation of CEQA (Title 14 California Code of Regulations Section 15000 et seq.) outline these necessary procedures for complying with CEQA. Paleontological resources are specifically included as a question in the CEQA Appendix G Environmental Checklist (Section 15023, Appendix G): "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?"

3.8.2.2.7 Seismic Hazards Mapping Act

Like the Alquist-Priolo Earthquake Fault Zoning Act, the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690-2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Earthquake Fault Zoning Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to the Alquist-Priolo Earthquake Fault Zoning Act in that the state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited

from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

3.8.2.3 Local

3.8.2.3.1 County of San Diego

San Diego County General Plan

The Safety Element of the San Diego County General Plan details the seismic and landslide hazards in the region and presents policies and implementation programs to reduce those hazards. The following policies from the Safety Element are relevant to the Proposed Project (County of San Diego 2011b):

- **Policy S-8.1: Development Location.** Locate development in areas where the risk to people or resources is minimized. In accordance with the California Department of Conservation Special Publication 42, require development to be located a minimum of 50 feet from active or potentially active faults, unless an alternative setback distance is approved based on geologic analysis and feasible engineering design measures adequate to demonstrate that the fault rupture hazard would be avoided.

- **Policy S-8.2: Engineering Measures to Reduce Risk.** Require all development to include engineering measures to reduce risk in accordance with the CBC, Uniform Building Code, and other seismic and geologic hazard safety standards, including design and construction standards that regulate land use in areas known to have or potentially have significant seismic and/or other geologic hazards.

- **Policy S-9.1: Landslide Risks.** Direct development away from areas with high landslide, mudslide, or rockfall potential when engineering solutions have been determined by the County to be infeasible.

- **Policy S-9.2: Risk of Slope Instability.** Prohibit development from causing or contributing to slope instability.

The Conservation and Open Space Element of the County General Plan discusses goals and policies to preserve paleontological resources in the region. The Conservation Element contains the following policies relating to paleontological resources that are relevant to the Proposed Project (County of San Diego 2011b):

- **Policy COS-9.1: Preservation.** Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.

- **Policy COS-9.2: Impacts of Development.** Require development to minimize impacts to unique geological features from human related destruction, damage, or loss.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed, and no goals and policies that are relevant to agriculture and forestry for the Proposed Project were identified (County of San Diego 2020).

3.8.2.3.2 City of El Cajon

City of El Cajon General Plan

The City 2000 General Plan includes policies that aim to minimize the risks to life and property resulting from disasters; however, it does not include any policies to preserve paleontological resources in the region. The following policies from the 2000 General Plan are relevant to the Project (City of El Cajon 2000):

- **Policy 16-1.4.** Environmental Impact Reports or Mitigated Negative Declarations which address seismic risks should be required for all major developments in:

  a. Emergency services and public utilities.
  b. Involuntary occupancies such as hospitals, jails, etc.
  c. High rise and high occupancy structures.

- **Policy 16-1.6.** Soil reports shall be required for all new construction.

3.8.3 Impact Analysis and Mitigation Measures

3.8.3.1 Analysis Methodology

Impacts to geology, soil, and paleontological resources were determined based on information summarized in Section 3.8.1 Environmental Setting that was obtained from reviews of:

- California DOC 2002 California Fault Parameters and fault information (California DOC 2002b, 2002c, and 2025a);
- California DOC Seismic Hazards Program: Liquefaction Zones (California DOC 2025b);
- local agency planning documents (County of San Diego 2011a and 2011b; City of El Cajon 2000);
- NRCS Web Soil Survey (NRCS 2019);
- Attachment 3.8-A: Paleontological Resources Technical Report;
- SWRCB soil erodibility factor information (SWRCB 2023);
- USDA hydrologic soil and wind erodibility groups information (USDA 2002a, 2002b, and 2017b);
- USDA SSURGO (USDA 2017a);
- USGS Interactive U.S. Fault Map (USGS 2025b);
- USGS Landslide Inventory and Susceptibility Map (USGS 2025c); and
- USGS fault, landslide, liquefaction, and subsidence information (USGS 2019, 2023a, 2023b, and 2025a).

3.8.3.2 Applicant-Proposed Measures

The following applicant-proposed measures (APMs) would be implemented for the Proposed Project:

- **APM GEO-01: Geotechnical Engineering Report.** SDG&E will review the recommendations and findings of a final geotechnical engineering report and the contractor's Geotechnical Engineer regarding the potential for seismic activity, landslides, expansive soils, slope instability and differential settling. SDG&E will incorporate those recommendations, as appropriate, into the final design of the Project.

3.8.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For geology, soils, and paleontological resources, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - Strong seismic ground shaking?
  - Seismic-related ground failure, including liquefaction?
  - Landslides?
- Result in substantial soil erosion or the loss of topsoil?
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

3.8.3.4 Impact Analysis

3.8.3.4.1 Impact GEO-01: Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; and landslides?

Construction

Less-than-Significant Impact. As shown in Figure 3.8-2: Active or Potentially Active Faults Located within 10 Miles of the Proposed Project, one unnamed fault is located approximately 2.8 miles northeast of the existing Suncrest Substation. The unnamed fault is undifferentiated Quaternary (i.e., active in the past 1.6 million years) and is a potentially active fault as a result. Because the Proposed Project is within 10 miles of a potentially active fault, the Proposed Project would be susceptible to earthquake forces and seismic shaking.

The Proposed Project would not introduce habitable structures; however, the proposed 230 kV OH segment would include poles as close as approximately 180 feet to the nearest residence and adjacent to roads. Pole 38 would be within 75 feet of a residence; however, because the residence is within the Proposed Project right-of-way, the residence would be relocated prior to Proposed Project construction and would not have the potential to be adversely affected by the Proposed Project. The next closest residence would be approximately 180 feet northeast of Pole 39. Therefore, the Proposed Project has the potential to cause adverse effects related to pole instability if poles are not designed to withstand seismic shaking. However, the Proposed Project would be designed to be consistent with CPUC GO 95, the CBC, and the geotechnical engineering report prepared in accordance with APM GEO-01. The geotechnical engineering report would include recommendations regarding the potential for seismic activity, landslides, expansive soils, slope instability, and differential settling. As a result, the Proposed Project would be able to withstand reasonably foreseeable seismic events. Incorporation of standard engineering practices and recommendations from the geotechnical engineering report would verify that people or structures would not be exposed to hazards associated with strong seismic ground shaking, and impacts would be less than significant.

The Proposed Project's proposed 230 kV OH segment would cross a County-designated liquefaction area between Poles 31 and 32. As shown in Figure 3.8-4: Landslide Potential within 1 Mile of the Proposed Project, approximately 1.6 miles (52 percent) of the proposed western 230 kV UG segment would cross areas with high to very high landslide potential, approximately 0.1 mile (20 percent) of the proposed eastern 230 kV UG segment would cross areas with high to very high landslide potential. Poles 1 through 29, 33, 37 through 47, and 49 through 57 of the proposed 230 kV OH segment would be located on land with high to very high landslide potential. To avoid impacts that may result from seismic activity, a geotechnical engineering report would be prepared as part of the engineering and design process in accordance with APM GEO-01. The Proposed Project would adhere to and implement design recommendations

and parameters, as appropriate, established in the Proposed Project-specific geotechnical engineering report, which would be prepared prior to construction. Additionally, the Proposed Project would be designed to be consistent with the design and engineering standards contained in CPUC GO 95 and the CBC. CPUC GO 95 Rule 48.2 requires the strength of steel structures and components for tubular steel pole structures to be designed using American Society of Civil Engineers 48-11. Chapter 18 of the CBC includes the requirements for site preparation for receiving a foundation, including the load-bearing values for soils and protection for the foundation from frost and water intrusion. With adherence to CPUC GO 95 and CBC, as well as implementation of APM GEO-01, Proposed Project structures and foundations would be designed to reduce the potential for impacts associated with landslides and impacts would be less than significant.

Therefore, with adherence to CPUC GO 95 and the CBC, as well as implementation of APM GEO-01, the construction of the Proposed Project components would have a less-than-significant impact related to the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, and landslides.

Operations and Maintenance

No Impact. Typical O&M activities would involve routine inspections and preventive maintenance to verify service reliability, as well as emergency work to maintain or restore service. Anticipated O&M activities may include access road maintenance and repair; transmission line repair, replacement, and reconductoring; insulator washing; repair and replacement of substation components; and vegetation management. O&M activities would not involve substantial ground disturbance or installation of new features that would expose people or structures to seismic hazards. Therefore, no impact related to the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, and landslides would occur during O&M of the Proposed Project.

3.8.3.4.2 Impact GEO-02: Would the project result in substantial soil erosion or the loss of topsoil?

Construction

Less-than-Significant Impact. Site preparation at the proposed staging and fly yards and structure work areas is expected to include minor grading and/or grubbing as needed to provide a reasonably level and vegetation-free surface. Ground-disturbing activities would expose soil to erosion by removing the vegetative cover and potentially compromising the soil structure. Rain and wind can further detach soil particles and transport them off site.

Because the proposed western 230 kV UG segment would be constructed within existing roads, where topsoil does not exist, no loss of topsoil would occur. The proposed eastern 230 kV UG segment would result in 2.26 acres of temporary impacts and 0.04 acre of permanent impacts. The proposed 230 kV OH segment would result in 32.39 acres of temporary impacts and 8.39 acres of permanent impacts. Areas temporarily impacted by construction could result in the loss of topsoil if it is present in work areas. Similarly, areas permanently impacted by construction would result in the loss of topsoil if it exists in permanent impact areas. Temporary work areas and permanent structure locations associated with the proposed 230 kV OH segment and proposed eastern 230 kV UG segment are most likely to result in the loss of topsoil. In addition,

temporary and/or permanent staging and fly yards, landing zones, and access roads have the potential to result in topsoil loss. Modifications to the existing Suncrest Substation that occur within the existing fence line would have no impact on topsoil because the soil has been previously disturbed.

As discussed in Chapter 2 Project Description, although topsoil reuse is not feasible in the locations of permanent structures, excessively rocky areas, or residential/disturbed sites, topsoil would be salvaged during temporary grading activities to a depth of up to 6 inches or to actual depth, if shallower, for on-site storage and use in site restoration locations where a habitat restoration specialist has determined that topsoil salvage is required. Salvaged topsoil material would be kept on site in the immediate vicinity of temporary disturbance areas or at a nearby approved work area to be used in the restoration of temporarily disturbed areas as appropriate. In addition, SDG&E would develop and implement a Storm Water Pollution Prevention Plan (SWPPP) and adhere to SDG&E's Best Management Practices (BMPs) Manual for Water Quality Construction to minimize erosion. The SWPPP and associated BMPs would be implemented to minimize soil erosion during construction and to reduce impacts to a less-than-significant level. BMPs may include the installation of silt fences, fiber rolls, and berms, as well as stockpile management to minimize sediment transport. As described in Section 5.10 Hydrology and Water Quality, the Proposed Project would comply with state storm water requirements and the terms of ministerial grading permits from the County and City to minimize soil erosion and the resulting impacts on water quality.

With implementation of applicable permit requirements and the SWPPP, which would include BMPs to control erosion and prevent off-site sedimentation, substantial soil erosion or substantial loss of topsoil is not anticipated to occur. As a result, impacts during construction would be less than significant.

Operations and Maintenance

No Impact. As discussed previously, O&M activities would not involve substantial ground disturbance or the installation of new features. Therefore, O&M activities would not result in soil erosion or the loss of topsoil. As a result, no impact would occur.

3.8.3.4.3 Impact GEO-03: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Construction

Less-than-Significant Impact. The Proposed Project would not cross any geologic units that are susceptible to subsidence. Although the span between Poles 31 and 32 would cross County-designated geologic units with liquefaction potential, no Proposed Project structures would be underlain by a geologic unit with liquefaction potential, as depicted in Figure 3.8-3: Liquefaction Areas within 1 Mile of the Proposed Project. However, approximately 1.6 miles (52 percent) of the proposed western 230 kV UG segment would cross areas with high to very high landslide potential; approximately 0.1 mile (20 percent) of the proposed eastern 230 kV UG segment would cross areas with high to very high landslide potential; and Poles 1 through 29, 33, 37 through 47, and 49 through 57 of the proposed 230 kV OH segment would be located on land

with high to very high landslide potential. Therefore, portions of the Proposed Project would be underlain by geologic units associated with landslides.

As discussed previously, the Proposed Project would implement recommendations, as appropriate, from the Proposed Project-specific geotechnical engineering report consistent with APM GEO-01, which will include avoiding the installation of Proposed Project structures on unstable soils. Additionally, the Proposed Project would be designed to be consistent with the design and engineering standards contained in CPUC GO 95 and the CBC. Although the proposed 230 kV UG segments would cross areas with high to very high landslide potential, the proposed western 230 kV UG segment would be located under existing roads that are presumed to be stable. The stability of the existing roads where the proposed western 230 kV UG segment would be installed and stability of the soil where the proposed eastern 230 kV UG segment would be installed would be confirmed in the geotechnical engineering report that would be prepared in accordance with APM GEO-01. Imported fill would be used to backfill trenches associated with the proposed western 230 kV UG segment and imported fill or topsoil, where applicable, would be used to backfill trenches associated with the proposed eastern 230 kV UG segment, which would stabilize the existing geologic conditions and reduce the potential for movement resulting from unstable geologic units. With implementation of APM GEO-01, impacts associated with the risk of landslides, lateral spreading, subsidence, liquefaction, and collapse would be less than significant.

Operations and Maintenance

No Impact. O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features that would cause unstable soils or result in off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. As a result, no impact would occur.

3.8.3.4.4 Impact GEO-04: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Construction, Operations and Maintenance

Less-than-Significant Impact. Approximately 36 percent of the proposed western 230 kV UG segment and approximately 66 percent of the proposed eastern 230 kV UG segment would occur on soils classified as Hydrologic Group D. Hydrologic Group D soils typically have high clay content and, depending on the type of clay, can exhibit shrink-swell characteristics. Poles 6, 9 through 20, 22, 23, 45, 46, and 56 would be located on soils classified as Hydrologic Group D. Approximately 48 percent of the existing Suncrest Substation is located on soils classified as Hydrologic Group D. Potentially expansive soils along Poles 6, 9 through 20, 22, 23, 45, 46, and 56 are unlikely to create geotechnical issues because new poles would be installed at depths of 6 to 40 feet (depending on the pole/structure type and location). In accordance with APM GEO-01, recommendations from the geotechnical engineering report, such as increasing pole depth, would be incorporated into the design if expansive soils are identified where the poles would be located. Therefore, the structures are anticipated to be buried below expansive soils, as defined in the 1994 Uniform Building Code.

Although the proposed 230 kV UG segments would only be buried to a depth of 3 to 6 feet, the electric conduit would be encased in a concrete duct bank and, as a result, would not be susceptible to potentially expansive soils. The retaining wall outside of the existing Suncrest Substation would be located on soils that could have expansive characteristics; however, the retaining wall, as well as all Proposed Project components, would be constructed in accordance with the CBC and recommendations from the Proposed Project-specific geotechnical engineering report, as appropriate, in accordance with APM GEO-01. Therefore, the Proposed Project is not anticipated to pose substantial risks to life or property as a result of constructing Proposed Project components on expansive soils, if they are present. As a result, with implementation of APM GEO-01, impacts would be less than significant.

O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features that would be installed on expansive soils. As a result, no impact would occur during O&M.

3.8.3.4.5 Impact GEO-05: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Construction, Operations and Maintenance

No Impact. Construction and O&M of the Proposed Project would not involve use of a septic tank or alternative wastewater disposal system. Wastewater generated at portable toilets during construction would be disposed of at appropriate off-site facilities. As a result, no impact would occur.

3.8.3.4.6 Impact GEO-06: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Construction

No Impact. As discussed in Section 3.8.1.7 Paleontological Resources, the proposed 230 kV UG segments, proposed 230 kV OH segment, and proposed staging yards would cross geologic units with low and very low potential for paleontological resources. In addition, the existing Suncrest Substation is underlain by geologic units with very low potential for paleontological resources. Therefore, construction activities associated with the proposed 230 kV UG segments, proposed 230 kV OH segment, and existing Suncrest Substation would be highly unlikely to directly or indirectly destroy a unique paleontological resource or site or unique geological feature. As a result, no impact would occur.

Operations and Maintenance

No Impact. As previously described, O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features that would potentially damage a unique paleontological resource or site or unique geologic feature. As a result, no impact would occur.

3.8.4 References

California DOC. 2002a. California Geomorphic Provinces. Online. https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf. Site visited April 2025.

California DOC. 2002b. Appendix A – 2002 California Fault Parameters, A Faults. Online. https://www.conservation.ca.gov/cgs/Documents/PSHA/A_flt.pdf. Site visited April 2025.

California DOC. 2002c. Appendix A – 2002 California Fault Parameters, B Faults. Online. https://www.conservation.ca.gov/cgs/Documents/PSHA/B_flt.pdf. Site visited April 2025.

California DOC. 2025a. Fault Slip Rates. Online. https://www.conservation.ca.gov/cgs/Pages/PSHA/sliprates.aspx. Site visited April 2025.

California DOC. 2025b. CGS Seismic Hazards Program: Liquefaction Zones. Online. https://data.ca.gov/dataset/cgs-seismic-hazards-program-liquefaction-zones. Site visited April 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

County of San Diego. 2011a. Section 2.6 Geology and Soils of the San Diego County General Plan Update EIR. Online. https://www.sandiegocounty.gov/content/sdc/pds/gpupdate/environmental.html. Site visited April 2025.

County of San Diego. 2011b. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County of San Diego. 2020. Draft Alpine Community Plan. San Diego County General Plan Part XI. Online. https://www.sandiegocounty.gov/pds/gpupdate/docs/bos_oct2010/B2.01_alpine.cp_102010.pdf. Site visited November 2025.

CPUC. 2024. GO 95 Rules for Overhead Line Construction. Online. https://www.cpuc.ca.gov/Home/Proceedings-and-Rulemaking/CPUC-general-orders. Site visited April 2025.

DPS. 2026. Paleontological Resources Technical Report for the San Diego Gas & Electric Company Sycamore Canyon 230 kV Loop-In to Suncrest Project.

FEMA. 2023. NEHRP Strategic Plan. Online. https://www.nehrp.gov/pdf/FY2022-29%20NEHRP%20Strategic%20Plan%20-%20Post%20Version.pdf. Site visited May 2025.

Germinario, M. 1993. The early Mesozoic Julian Schist, Julian, California. In, R.G. Gastil and R.H. Miller (eds.), The Prebatholithic Stratigraphy of Peninsular California. Geological Society of America Special Papers 279: 107–118.

Hildebrand, R.S., and J.B. Whalen. 2014. Arc and slab-failure magmatism in Corderilleran batholiths II – the Cretaceous Peninsular Ranges Batholith of southern and Baja California. Geoscience Canada 41: 399-458.

ICC. 2025. California Building Code, Title 24, Volume 1 of Part 2. Online. https://codes.iccsafe.org/content/CABC2025P1/copyright. Site visited November 2025.

NRCS. 2019. Web Soil Survey. Online. https://websoilsurvey.nrcs.usda.gov/app/. Site visited April 2025.

SDNHM. 2006. Paleontological Mitigation: SDG&E Sycamore Substation, San Diego, California (City of San Diego Work Order No. 2802106). Unpublished paleontological monitoring report prepared for SDG&E under contract to Mooney Jones & Stokes, dated 4 August 2006.

SDNHM. 2026. Final Paleontological Resources Technical Report.

Statewide California Earthquake Center. 1997. More on Mmax. Online. https://central.scec.org/publication/358. Site visited April 2025.

SWRCB. 2023. RUSLE K values. Online. https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/guidance/k_factor_map.pdf. Site visited April 2025.

Tan, S.S. 2002. Geologic map of the El Cajon 7.5-minute quadrangle, San Diego County, California: A digital database. California Geological Survey, Preliminary Geologic Maps PGM-02-06. Scale 1:24,000.

Todd, V.R. 2004. Preliminary geologic map of the El Cajon 30’ x 60’ quadrangle, southern California. USGS Open-File Report 2004-1361. Scale 1:100,000.

USDA. 2002a. Hydrologic Soil Groups. Online. https://efotg.sc.egov.usda.gov/references/Public/PR_defunct/FOTGHydrologicGroups.pdf. Site visited April 2025.

USDA. 2002b. Wind Erodibility Groups. Online. https://efotg.sc.egov.usda.gov/references/Agency/SD/Archived_winderos_100415.pdf. Site visited April 2025.

USDA. 2017a. USA SSURGO - Soil Potential Subsidence. Online. https://www.arcgis.com/home/item.html?id=3a1100ca5f6d4bd99a93601e156479bf. Site visited April 2025.

USDA. 2017b. USA SSURGO Erodibility Factor. Online. https://www.arcgis.com/home/item.html?id=ac1bc7c30bd4455e85f01fc51055e586#!. Site visited April 2025.

USGS. 2019. Land Subsidence. Online. https://www.usgs.gov/mission-areas/water-resources/science/land-subsidence. Site visited April 2025.

USGS. 2023a. What is liquefaction? Online. https://www.usgs.gov/faqs/what-liquefaction. Site visited April 2025.

USGS. 2023b. What is a landslide and what causes one? Online. https://www.usgs.gov/faqs/what-landslide-and-what-causes-one. Site visited April 2025.

USGS. 2025a. What is a fault and what are the different types? Online. https://www.usgs.gov/faqs/what-a-fault-and-what-are-different-types. Site visited April 2025.

USGS. 2025b. Interactive U.S. Fault Map. Online. https://www.usgs.gov/tools/interactive-us-fault-map. Site visited April 2025.

USGS. 2025c. U.S. Landslide Inventory and Susceptibility Map. Online. https://www.usgs.gov/tools/us-landslide-inventory-and-susceptibility-map. Site visited April 2025.

Walawender, M.J. 2022. The Peninsular Ranges: A geological guide to San Diego's back country. San Diego Geological Society, Inc., 156 pp.

Walsh, S. L. 1996. Middle Eocene mammal faunas of San Diego County, California. In: D.R. Prothero and R.J. Emry (eds.). the Terrestrial Eocene-Oligocene Transition in North America. Cambridge University Press, Cambridge England, pp. 75-119.

Walsh, S.L., Prothero, D.R., and Lundquist, D.J., 1996. Stratigraphy and paleomagnetism of the middle Eocene Friars Formation and Poway Group, southwestern San Diego County, California. In: D.R. Prothero and R.J. Emry (eds.). the Terrestrial Eocene-Oligocene Transition in North America. Cambridge University Press, Cambridge England, pp. 120-154.

ATTACHMENT 3.8-A: PALEONTOLOGICAL RESOURCES TECHNICAL REPORT

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Attachment 3.8-A: Paleontological Resources Technical Report is included in the Administrative Draft Environmental Impact Report Volume 2.

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3.9 GREENHOUSE GAS EMISSIONS

This section describes the existing conditions for greenhouse gas (GHG) emissions in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.9.1 Environmental Setting

3.9.1.1 Greenhouse Gas Emissions and Climate Change

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. GHGs refer to gases that trap heat in the earth's atmosphere, causing a greenhouse effect. GHGs include but are not limited to carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Atmospheric concentrations of CO_2 and CH_4—two directly emitted, long-lived GHGs—are currently well above the range of atmospheric concentrations that occurred over the past 650,000 years.

Increased atmospheric levels of CO_2 are correlated with rising temperatures, and concentrations of CO_2 have increased by 49 percent since the late 1700s (United States [U.S.] Environmental Protection Agency [EPA] 2024). Climate models show that temperatures will likely increase by anywhere between 1.1 degrees Celsius (°C) to 5.4°C by 2100 (National Oceanic and Atmospheric Administration [NOAA] 2012). Human activities, such as burning fossil fuels for electricity production and vehicle use, are the primary cause for the elevated concentration of GHGs in the atmosphere. Global climate change results in the following:

- warmer temperatures that increase the frequency, intensity, and duration of heat waves;
- an increase in the frequency and intensity of extreme weather events, such as droughts and floods;
- rising sea levels that threaten coastal communities and ecosystems;
- changes in the patterns and amount of rainfall that can affect water supplies; and
- changes in ecosystems that influence the geographic ranges of plant and animal species and the timing of their lifecycle events, such as migration and reproduction (U.S. EPA 2025a).

Global warming potential (GWP) estimates how much a given mass of a specific GHG contributes to climate change. The term enables comparison of the warming effects of different gases. GWP uses a relative scale that compares the warming effect of the gas in question with that of the same mass of CO_2. The CO_2 equivalent (CO_2e) is a measure used to compare the effect of emissions of various GHGs based on their GWP when projected over a specified time period (generally 100 years). CO_2e is commonly expressed as metric tons of CO_2e ($MTCO_2e$) or million metric tons of CO_2e ($MMTCO_2e$). The CO_2e for a gas is obtained by multiplying the mass of the gas (in tons) by its GWP.

The U.S. EPA has maintained an inventory that tracks U.S. GHG emissions and sinks by source, economic sector, and GHG since 1990. In the U.S., electricity production accounted for 25 percent of the CO_2e emissions in 2022, as shown in Table 3.9-1: United States Greenhouse Gas Emissions by Sector. CO_2, CH_4, and N_2O are released during the combustion of fossil fuels

to produce electricity, and they make up the majority of GHG emissions from this sector. Less than 1 percent of GHG emissions comes from SF_6, an insulating chemical used in electricity transmission and distribution equipment (U.S. EPA 2025b).

Table 3.9-1: United States Greenhouse Gas Emissions by Sector

Sector	Total 2022 Emissions ($MMTCO_2e$)	Total 2022 Emissions (percentage)
Agriculture	634.0	10
Commercial	463.7	7
Electric Power	1,577.5	25
Industry	1,452.5	23
Residential	391.3	6
Transportation	1,801.5	28
U.S. Territories	22.7	< 1
Total	**6,343.2**	**100**

Source: U.S. EPA 2025b
Note: Due to rounding, totals may not sum.

The California Air Resources Board (CARB) GHG inventory provides estimates of GHG emissions that originate from human activities within California, as well as emissions associated with imported electricity. CARB's inventory includes CO_2, CH_4, N_2O, and fluorinated gases with high GWPs, which include HFCs, PFCs, SF_6, and nitrogen trifluoride. In California, electricity use contributed to 16 percent of total CO_2e emissions in 2022, as summarized in Table 3.9-2: California Greenhouse Gas Emissions by Sector (CARB 2025).

Table 3.9-2: California Greenhouse Gas Emissions by Sector

Sector	Total 2023 Emissions ($MMTCO_2e$)	Total 2023 Emissions (percentage)
Agriculture	29.2	8.1
Commercial & Residential	43.3	12.0
Electricity	57.2	15.9
High GWP[1]	21.4	5.9
Industrial	66.9	18.6
Transportation	133.7	37.1
Waste	8.6	2.4
Total[2]	**360.4**	**100**

Source: CARB 2025
Note: Due to rounding, totals may not sum.

[1] The High GWP sector consists primarily of refrigerants.

The San Diego Association of Government's (SANDAG's) San Diego Regional Climate Action Roadmap contains an inventory of the San Diego Region's[2] 2022 regional GHG emissions. As outlined in Table 3.9-3: County of San Diego's Greenhouse Gas Emissions by Sector, electricity accounted for 18 percent of GHG emissions in the region (SANDAG 2025a).

Table 3.9-3: County of San Diego's Greenhouse Gas Emissions by Sector

Emissions Category	Total 2022 Emissions ($MMTCO_2e$)	Total 2022 Emissions (percentage)
Passenger Cars and Light-Duty Vehicles	7.80	34.9
Electricity	4.03	18.0
Natural Gas	3.01	13.5
Industrial	2.40	10.7
Heavy-Duty Trucks and Vehicles	2.28	10.2
Other Fuels	0.86	3.8
Off-Road Vehicles	0.68	3.0
Solid Waste	0.32	1.4
Aviation	0.31	1.4
Water	0.25	1.1
Marine Vesels	0.20	0.9
Agriculture	0.18	0.8
Wastewater	0.05	0.2
Rail	0.03	0.1
Total	**22.39**	**100**

Source: SANDAG 2025a
Note: Due to rounding, totals may not sum.

3.9.1.2 SDG&E Programs

SDG&E has been engaged for many years in activities to reduce GHG emissions. These activities include programs to increase energy efficiency and efforts to meet the Renewables Portfolio Standard (RPS), which requires 100 percent carbon-free energy by 2045. In 2023, 50 percent of SDG&E's retail sales were from renewable energy sources (SDG&E 2023). SDG&E's The Path to Net Zero: A Decarbonization Roadmap for California includes SDG&E's recommendation for California to achieve carbon neutrality and is the first publicly available analysis to use the industry standard for electric reliability and industry modeling software in modeling how to decarbonize California by 2045 (SDG&E 2022).

[2] SANDAG defines the San Diego Region as the San Diego-Chula Vista-Carlsbad Metropolitan Statistical Area and encompasses the entirety of San Diego County.

As discussed in Section 3.7 Energy, SDG&E has several rebates and incentives programs available to agricultural, industrial, and public customers. These programs are intended to encourage energy-saving adjustments, including installation of no-cost measures, and information on advanced energy efficiency, battery storage opportunities, and solar photovoltaic installations for multi-family and manufactured housing properties. SDG&E also has the Golden State Rebates program, which enables customers to receive rebates toward purchasing specific energy-efficient products for their homes.

3.9.2 Regulatory Setting

3.9.2.1 Federal

3.9.2.1.1 Federal Mandatory Reporting of Greenhouse Gases (Title 40, Part 98 of the Code of Federal Regulations)

The U.S. EPA promulgated the Federal Mandatory Reporting of Greenhouse Gases rule in 2009 to require mandatory reporting of GHGs from large GHG emissions sources in 31 source categories in the U.S. In general, the threshold for reporting is 25,000 $MTCO_2e$ or more. Reporting is at the facility level; however, certain suppliers of fossil fuels and industrial GHGs, along with vehicle and engine manufacturers, report at the corporate level. Facilities and suppliers began collecting data on January 1, 2010. Manufacturers of vehicles and engines outside of the light-duty sector began reporting CO_2 for model year 2011 and other GHGs in subsequent model years as part of existing U.S. EPA certification programs. Since 2012, the U.S. EPA and Title 40, Part 98, Subpart DD of the Code of Federal Regulations also require the reporting of SF_6 emissions from certain electrical facilities.

3.9.2.1.2 Clean Air Act

On April 2, 2007, in Massachusetts v. EPA, the Supreme Court directed the EPA Administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. In making these decisions, the EPA Administrator is required to follow the language of Section 202(a) of the Clean Air Act (CAA). On December 7, 2009, the EPA Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the CAA:

- The Administrator found that elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."

- The Administrator further found the combined emissions of GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

3.9.2.1.3 Inflation Reduction Act of 2022

As part of Section 60114 of the Inflation Reduction Act of 2022, the U.S. EPA issued Climate Pollution Reduction Grants to states, local governments, tribes, and territories to develop and implement ambitious plans for reducing greenhouse gas emissions and other harmful air pollution (U.S. EPA 2025c). All planning grantees must submit a priority climate action plan (PCAP) and comprehensive climate action plan to the U.S. EPA.

3.9.2.2 State

CARB is the lead agency for implementing climate change regulations in California. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution issues. Key efforts by the state are described under the following subsections.

3.9.2.2.1 Assembly Bill 32 (2006), California Global Warming Solutions Act

California's key initiative for reducing GHG emissions is Assembly Bill (AB) 32, passed by the state legislature on August 31, 2006. This effort set a target to reduce GHG emissions to 1990 levels by 2020. CARB established the level of GHG emissions in 1990 at 427 $MMTCO_2e$. The emissions target of 427 $MMTCO_2e$ requires the reduction of 169 $MMTCO_2e$ from the state's projected business-as-usual (BAU) 2020 emissions of 596 $MMTCO_2e$. AB 32 requires CARB to prepare a Scoping Plan that outlines the main state strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. CARB approved the Scoping Plan on December 11, 2008. The Scoping Plan contains strategies California will implement to achieve the reduction of 169 $MMTCO_2e$, or approximately 30 percent, from the state's projected 2020 emission level of 596 $MMTCO_2e$ under a BAU scenario (this is a reduction of 42 $MMTCO_2e$, or almost 10 percent from average emissions from 2002 to 2004). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The Scoping Plan calls for reductions in GHG emissions to be achieved by implementing the following measures and standards:

- improved emissions standards for light-duty vehicles (estimated reduction of 31.7 $MMTCO_2e$),
- the Low-Carbon Fuel Standard (15.0 $MMTCO_2e$),
- energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 $MMTCO_2e$), and
- an RPS for electricity production (21.3 $MMTCO_2e$).

The Scoping Plan identifies 18 emission-reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low-carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle-efficiency measures, goods movement, solar roof programs, industrial emissions, high-speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures were designed to reduce emissions by 174 $MMTCO_2e$ by 2020.

On August 24, 2011, CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. CARB also approved a more robust California Environmental Quality Act- (CEQA-)

equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low-carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the state's "longer-term" GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan (CARB 2017), to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.

The 2022 Scoping Plan (CARB 2022) was approved in December 2022 and assesses progress toward the statutory 2030 GHG reduction target of at least 40 percent below 1990 emissions, while laying out a path to achieving carbon neutrality no later than 2045 and reduction in anthropogenic emissions by 85 percent below 1990 levels. The 2022 Scoping Plan Update focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, and natural and working lands. The 2022 Scoping Plan is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

3.9.2.2.2 Senate Bill 375 (2008)

Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every 4 years and must update them a minimum of every 8 years. MPOs, in turn, must demonstrate how their plans, policies, and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCSs). The SCSs are included in Regional Transportation Plans, which are reports required by state law. However, if an MPO finds that its SCS will not meet the GHG reduction target, it may prepare an Alternative Planning Strategy, which identifies the impediments to achieving the targets.

3.9.2.2.3 Executive Order B-30-15

EO B-30-15 establishes an interim GHG reduction target of 40 percent below 1990 levels and directs state agencies to take additional actions to prepare for the impacts of climate change. These actions are captured in the state's adaptation strategy, Safeguarding California (California Natural Resources Agency 2018), which is to be updated every 3 years.

3.9.2.2.4 Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197

In 2016, the Governor signed SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on the foundation of AB 32 to achieve the state's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change analysis of the emission trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e.

As the companion bill to SB 32, AB 197 provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Posted in December 2016, AB 197 provided easier public access to air pollutant emissions data collected by CARB.

3.9.2.2.5 Executive Order B-55-18

EO B-55-18 establishes a new statewide goal to "achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The goal is in addition to the existing statewide targets of reducing GHG emissions.

3.9.2.2.6 California Mandatory Greenhouse Gas Reporting Regulation (Title 17 California Code of Regulations Sections 95100-95133)

Pursuant to AB 32, CARB adopted the California Mandatory Greenhouse Gas Reporting Regulation. The facilities that are required to annually report their GHG emissions include electricity-generating facilities, electricity-retail providers and power marketers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 $MTCO_2e$ per year from stationary-source combustion. In particular, retail providers of electricity are required to report fugitive emissions of SF_6 related to transmission and distribution systems, substations, and circuit breakers located in California that the retail provider or marketer is responsible for maintaining in proper working order.

3.9.2.2.7 Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (Title 17 California Code of Regulations Sections 95350-95359)

SF_6 is a commonly used insulator in electric transmission and distribution equipment. Because of its high GWP, CARB adopted the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear in 2010. This regulation requires that gas-insulated switchgear owners not exceed the maximum annual SF_6 emission rate for active gas-insulated switchgear equipment and establish and adhere to written procedures to track all gas containers as they are leaving and entering storage, calibrate and weigh all gas containers on a scale, establish and maintain a complete record of gas-insulated switchgear equipment inventory, and submit annual reports to the CARB Executive Officer for emissions that occurred during the previous calendar year.

In response to emerging technologies using lower- or zero-GWP insulators, the regulation was amended in 2021 and required emission rates for SF_6-insulated switchgear to not exceed 1 percent. The amended regulation also included a phase-out schedule for new SF_6-insulated

equipment, coverage of other GHGs beyond SF_6 used in gas-insulated switchgear, and other changes that enhance the accuracy of emissions accounting and reporting.

3.9.2.2.8 Senate Bill 100

SB 100, also known as the 100 Percent Clean Energy Act, was signed into law in September 2018 and amended the California RPS Program. The RPS Program requires the California Public Utilities Commission (CPUC) to establish an RPS that requires all retail sellers of electricity to procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours of those products sold to their retail end-use customers achieve the following:

- 25 percent of retail sales by December 31, 2016;
- 33 percent by December 31, 2020;
- 44 percent by December 31, 2024;
- 52 percent by December 31, 2027; and
- 60 percent by December 31, 2030.

SB 100 also established a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales by 2045. Additionally, the RPS Program requires each local publicly owned electric utility to procure a minimum quantity of electricity products from eligible renewable energy resources to achieve the procurement requirements established by the program. SB 100 requires the California Energy Commission (CEC), CPUC, and CARB to issue a joint policy report in 2021 and every 4 years thereafter. The 2021 SB 100 Joint Agency Report evaluated the challenges and opportunities in the implementation of SB 100. Furthermore, the report promoted the construction of clean electricity generation and storage infrastructure, diversity in energy resources and technologies, retaining some natural gas power, and the necessity of further analysis (CEC 2021). The CEC is currently developing a new version of the Joint Agency Report, which will expand areas flagged for further study.

3.9.2.3 Regional

3.9.2.3.1 San Diego Air Pollution Control District

The San Diego Air Pollution Control District (SDAPCD) is the regional government agency that regulates sources of air pollution within San Diego County. SDAPCD participates in regional GHG initiatives, including the Climate Initiative Vision Action Team, SANDAG's Sustainable Communities Strategy, and local climate actions plans and projects. SDAPCD has not established quantitative CEQA thresholds of significance for construction or mobile source-related emissions.

3.9.2.3.2 San Diego Association of Governments

San Diego Regional Climate Action Roadmap

In December 2025, SANDAG finalized the comprehensive San Diego Regional Climate Action Roadmap, which is a long-term vision for reducing climate pollution that builds on existing climate action planning in the region and identifies 23 long-term measures to reduce GHG emissions in the San Diego region through 2045. The roadmap includes an updated 2022 GHG inventory showing the amount of GHG emissions coming from different sources in the region, as

well as analyses on how the roadmap can reduce air pollution, support workers in the region, and benefit residents (SANDAG 2025a).

2025 Regional Plan

SANDAG is an MPO and council of governments that addresses the region's issues, including improving equity, transportation, air quality, clean energy, economic development, goods movement, public health, public safety, housing, and more. In December 2025, SANDAG's Final 2025 Regional Plan was adopted. The Regional Plan provides a long-term blueprint for the region that seeks to meet regulatory requirements; address traffic congestion; and create equal access to jobs, education, healthcare, and other community resources. The Regional Plan combines the Regional Transportation Plan, SCS, and Regional Comprehensive Plan. The Regional Plan complies with state and federal mandates, including an SCS, per SB 375, that achieves GHG emission reduction targets set by CARB; compliance with federal civil rights requirements (Title VI); and environmental justice considerations, air quality conformity, and a public participation process (SANDAG 2025b).

2024 San Diego Regional Priority Climate Action Plan

In March 2024, SANDAG published the San Diego Regional PCAP in accordance with the U.S. EPA's guidance for Phase 1 of the Climate Pollution Reduction Grant Program. The PCAP includes actions that will significantly reduce GHG emissions, that can be implemented before 2030, and that benefit low-income and disadvantaged communities in the San Diego region (SANDAG 2024). The focus of GHG reduction strategies in the PCAP is in the transportation, building energy, energy supply, and water sectors.

3.9.2.4 Local

3.9.2.4.1 County of San Diego

2024 Climate Action Plan

The County's 2024 Climate Action Plan (CAP) includes actions to meet GHG emissions reduction targets and achieve net zero-carbon emissions by 2045. The County aims to reduce GHG emissions to 43.6 percent below 2019 levels and 85.4 percent below 2019 levels by 2030 and 2045, respectively. To reach the 2030 and 2045 targets, the CAP establishes nine strategies, 21 measures, and 70 actions that the County must take to reduce GHG emissions from five emissions reduction sectors: built environment and transportation, energy, solid waste, water and wastewater, and agriculture and conservation.

The County's CAP is also intended to be used for future project-specific GHG emissions analyses by being prepared consistent with the tiering and streamlining provisions of Section 15183.5 of the CEQA Guidelines. The Final Supplemental Environmental Impact Report (SEIR) for the CAP provides the appropriate level of environmental review to allow future projects to tier from and streamline their analysis of GHG emissions pursuant to CEQA Guidelines Section 15183.5(b)(2). The County Board of Supervisors adopted the following threshold of significance to evaluate GHG emissions:

> "A proposed project would have a less than significant cumulatively considerable contribution to climate change impacts if it is found to be consistent with the County's

Climate Action Plan; and, would normally have a cumulatively considerable contribution to climate change impacts if it is found to be inconsistent with the County's Climate Action Plan."

Consistency with the CAP is determined through the CAP Consistency Review Checklist (Checklist), which is provided as Appendix 8 to the CAP. The Checklist, in conjunction with the CAP, provides a streamlined CEQA review process for proposed discretionary projects. If a project does not comply with applicable consistency requirements in the Checklist, the project cannot use the CAP Checklist for CEQA streamlining (County of San Diego 2024).

San Diego County General Plan

The Conservation and Open Space Element of the San Diego County General Plan discusses goals and policies to control the emission of air quality pollutants and GHG in the region. The Conservation Element contains the following policy relating to air quality that is relevant to the Proposed Project (County of San Diego 2011):

- **Policy COS-14.10: Low-Emission Construction Vehicles and Equipment.** Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed and no policies that are relevant to GHG emissions for the Proposed Project were identified (County of San Diego 2020).

County of San Diego 2015 Greenhouse Gas Guidance

In 2015, the County published guidelines to address GHG emissions. The guidance includes a suggested "bright line" screening-level threshold for projects of 900 $MTCO_2e$ based on the California Air Pollution Control Officers Association's (CAPCOA's) identified screening threshold (County of San Diego 2015). The guidance document indicates that construction emissions may be amortized over an assumed 20-year life of a project. Project emissions below this bright-line threshold are assumed to be less than significant for GHG emissions.

3.9.2.4.2 City of El Cajon

City of El Cajon Sustainability Initiative

The City's Sustainability Initiative includes the following eight strategies aimed at achieving an overall reduction in the City's GHG emissions:

- Strategy 1: Enhance City Vehicle Fleet. Strategy 1 focuses on the reduction in use of gasoline and diesel-powered vehicles and equipment by increasing the purchasing and use of zero-emission and alternative fuel vehicles.

- Strategy 2: Reduce Fuel Use. Strategy 2 includes the reduction of fuel consumption by improving traffic flow and using renewable or alternative fuels for off-road vehicles and equipment.

- Strategy 3: Reduce Vehicle Miles Traveled. Strategy 3 aims to reduce the total vehicle miles traveled locally by increasing non-vehicular modes of travel, encouraging smart growth development in areas already served by transit, and reducing parking in key areas.

- Strategy 4: Increase Building Energy Efficiency. Strategy 4 includes incentivizing residential and commercial units to be more energy efficient.

- Strategy 5: Renewable Energy. Strategy 5 focuses on streamlining access to renewable energy; increasing the supply of renewable energy for residential, commercial, and municipal operations; and increasing the amount of onsite renewable energy at existing and new residential and non-residential development.

- Strategy 6: Increase Water Efficiency. Strategy 6 aims to provide residents, businesses, and municipal operators effective ways to reduce water consumption.

- Strategy 7: Reduce and Recycle Solid Waste. Strategy 7 includes the reduction of solid waste deposited at landfills by diverting it to other waste streams such as recycling or composting.

- Strategy 8: Carbon Sequestration. Strategy 8 focuses on the preservation and expansion of tree growth in the City to increase the amount of carbon sequestration (City of El Cajon 2020).

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals or policies that pertain to the Proposed Project concerning GHG emissions were identified (City of El Cajon 2000).

3.9.3 Impact Analysis and Mitigation Measures

3.9.3.1 Analysis Methodology

Impacts from GHG emissions associated with the Proposed Project were determined by comparing the anticipated emissions from the construction and the operations and maintenance (O&M) phases of the Proposed Project to applicable emissions thresholds established by CAPCOA. Emissions were calculated for the following sources for the construction phase of the Proposed Project:

- emissions from off-road equipment use,
- emissions from on-road vehicle travel, and
- emissions from helicopter use.

Emissions were calculated for the following sources for the O&M phase of the Proposed Project:

- exhaust emissions from on-road vehicle travel,
- annual electricity consumption at SDG&E's existing Suncrest Substation, and
- increases in fugitive SF_6 losses at SDG&E's existing Suncrest Substation.

As documented in Attachment 3.4-B: Air Quality and GHG Calculations in Section 3.4 Air Quality, these emissions estimates were generated using the methods established in version 2022.1 of the California Emissions Estimator Model (CalEEMod), CARB's Emission Factor (EMFAC) model, and Swiss Federal Office of Civil Aviation (FOCA) Guidance on the Determination of Helicopter Emissions. The entirety of the construction process was separated into 23 unique phases of construction. Unless otherwise specified, off-road equipment, on-road vehicles, and helicopters were assumed to operate for the entire duration of the phase. Work was assumed to occur every day of the week except Sundays and federal holidays. Each unique phase of construction and its associated activities, equipment, and equipment usage are shown in Table 15 of Attachment 3.4-B: Air Quality and GHG Calculations in Section 3.4 Air Quality.

On-road vehicle distances were assumed to be 20 miles for each one-way vehicle trip (the approximate distance from the City of El Cajon to the easternmost section of the Proposed Project). Material hauling trips by flatbed trucks, dump trucks, and haul trucks are accounted for in phases S-02 through S-05, S-14 through S-19, and S-22 through S-23, as shown in Table 15 of Attachment 3.4-B: Air Quality and GHG Calculations in Section 3.4 Air Quality.

3.9.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to GHG emissions.

3.9.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For GHG emissions, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

As discussed in Section 3.9.2.4.1 County of San Diego, the County of San Diego 2015 Greenhouse Gas Guidance includes a suggested "bright line" screening-level threshold for projects of 900 $MTCO_2e$ based on the CAPCOA's identified screening threshold. The guidance document indicates that construction emissions may be amortized over an assumed 20-year life of a project. Project emissions below this bright-line threshold are assumed to be less than significant for GHG emissions.

3.9.3.4 Impact Analysis

3.9.3.4.1 Impact GHG-01: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction, Operations and Maintenance

Less-than-Significant Impact. As presented in Attachment 3.4-B: Air Quality and GHG Calculations in Section 3.4 Air Quality, emission factors from the following sources were used to

calculate GHG emissions from construction (e.g., heavy equipment use, helicopter use, and on-road vehicle travel), maintenance vehicle use, electricity consumption, and fugitive SF_6 losses:

- CalEEMod v2022.1;
- U.S. EPA AP-42, Compilation of Air Pollutant Emission Factors;
- CARB's EMFAC; and
- the Swiss FOCA Guidance on the Determination of Helicopter Emissions (FOCA 2015).

Operations of the Proposed Project would begin in 2032, once the construction phase has been completed. While the Proposed Project would be predominantly managed off site, regular maintenance for the Proposed Project components is anticipated to include one annual inspection.

Modifications to the existing Suncrest Substation would include the addition of one 500 kV circuit breaker and four 230 kV circuit breakers, which would utilize SF_6 for insulation. The SF_6 volume at the substation was estimated using preliminary design information and typical values from the likely circuit breaker manufacturers. Leak rates when operational would be 0.1 percent for 230 kV and 500 kV equipment. Because the existing Suncrest Substation is currently operational, the increased fugitive emissions of SF_6 were only calculated for the additional circuit breakers.

Table 3.9-4: Proposed Project Annual GHG Construction Emissions provides the anticipated GHG emissions, by emission source, from each year of construction. Table 3.9-5: Proposed Project Annual GHG Emissions combines the anticipated GHG emissions from the construction phase of the Proposed Project with the anticipated annual GHG emissions from O&M.

As discussed previously, SDAPCD has not established quantitative CEQA GHG thresholds of significance for construction or mobile source-related emissions. However, the County's 2015 Greenhouse Gas Guidance includes a suggested "bright line" screening-level threshold for projects of 900 $MTCO_2e$ based on CAPCOA's identified screening threshold. The guidance document indicates that construction emissions may be amortized over an assumed 20-year life of a project. Project emissions below this bright-line threshold are assumed to be less than significant for GHG emissions.

As shown in Table 3.9-5: Proposed Project Annual GHG Emissions, total CO_2e emissions during construction would be approximately 14,442.34 $MTCO_2e$. When amortized over an assumed 20-year life, the Proposed Project's construction CO_2e emissions are reduced to approximately 722.1 $MTCO_2e$, which is well below the threshold of 900 $MTCO_2e$. Annual total CO_2e emissions during O&M would be well below the County's threshold of 900 $MTCO_2e$, as shown in Table 3.9-5: Proposed Project Annual GHG Emissions. The annual Proposed Project construction CO_2e emissions during the amortized 20-year life combined with the annual Proposed Project O&M CO_2e emissions would be 779.1 $MTCO_2e$, which is well below the County's threshold of 900 $MTCO_2e$. As a result, impacts would be less than significant.

Table 3.9-4: Proposed Project Annual GHG Construction Emissions

Emission Source	Annual Construction Emissions (metric tons)			
	CO_2	CH_4	N_2O	CO_2e
2027				
Off Road Equipment	231.32	0.01	< 0.01	232.12
On Road Vehicles	109.43	< 0.01	0.01	112.12
On Road Dust	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00
Subtotal	**340.76**	**0.01**	**0.01**	**344.24**
2028				
Off Road Equipment	2,539.62	0.10	0.02	2,548.33
On Road Vehicles	1,445.08	0.02	0.11	1,478.23
On Road Dust	0.00	0.00	0.00	0.00
Helicopter Use	1,781.34	0.00	0.00	1,781.34
Earth Moving	0.00	0.00	0.00	0.00
Subtotal	**5,766.04**	**0.13**	**0.13**	**5,807.89**
2029				
Off Road Equipment	2,511.25	0.10	0.02	2,519.87
On Road Vehicles	1,115.61	0.02	0.09	1,142.72
On Road Dust	0.00	0.00	0.00	0.00
Helicopter Use	66.89	0.00	0.00	66.89
Earth Moving	0.00	0.00	0.00	0.00
Subtotal	**3,693.76**	**0.12**	**0.11**	**3,729.48**
2030				
Off Road Equipment	1,492.22	0.06	0.01	1,497.34
On Road Vehicles	564.87	0.01	0.03	574.18
On Road Dust	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00
Subtotal	**2,057.09**	**0.07**	**0.04**	**2,071.52**

Emission Source	Annual Construction Emissions (metric tons)			
	CO_2	CH_4	N_2O	CO_2e
2031				
Off Road Equipment	957.65	0.04	0.01	960.94
On Road Vehicles	561.93	0.01	0.04	573.07
On Road Dust	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00
Subtotal	**1,519.58**	**0.05**	**0.04**	**1,534.01**
2032				
Off Road Equipment	598.33	0.02	< 0.01	600.38
On Road Vehicles	349.06	0.01	0.02	354.81
On Road Dust	0.00	0.00	0.00	0.00
Helicopter Use	0.00	0.00	0.00	0.00
Earth Moving	0.00	0.00	0.00	0.00
Subtotal	**947.39**	**0.03**	**0.02**	**955.19**
Total	**14,324.61**	**0.41**	**0.36**	**14,442.34**
Amortized (20-year life)				**722.12**

Note: Each year of construction includes all or a portion of the following construction activities, as defined in Attachment 3.4-B: Air Quality and GHG Calculations in Section 3.4 Air Quality:

- 2027: Survey and Staking, Utility Locates, and Mobilization (S-01 through S-03)
- 2028: Survey and Staking, Utility Locates, Access Road Construction, Conventional Structure Foundation Installation, Conventional Structure Installation, Helicopter Support, Helicopter Landing Pad Construction, Helicopter Landing Platform Construction, Helicopter Site Preparation, Helicopter Structure Foundation Installation, Helicopter Structure Installation, Existing Suncrest Substation Site Preparation, and Existing Suncrest Substation Below-Grade Construction (S-01, S-02, S-04 through S-12, S-18, and S-19)
- 2029: Survey and Staking, Utility Locates, Conventional Structure Foundation Installation, Conventional Structure Installation, Conductor Installation, Excavate Trench, Duct Bank and Conduit Installation, Existing Suncrest Substation Below-Grade Construction, Existing Suncrest Substation Above-Grade Construction, and Site and Right-of-Way (ROW) Restoration (S-01, S-02, S-05, S-06, S-13 through S-15, S-19, S-20, and S-22)
- 2030: Survey and Staking, Utility Locates, Excavate Trench, Duct Bank and Conduit Installation, Cable Installation, Existing Suncrest Substation Above-Grade Construction, and Site and ROW Restoration (S-01, S-02, S-14 through S-16, S-20, and S-23)
- 2031: Survey and Staking, Utility Locates, Paving, Existing Suncrest Substation Above-Grade Construction, Site and ROW Restoration (S-01, S-02, S-17, S-20, and S-23)
- 2032: Existing Suncrest Substation Above-Grade Construction and Commissioning and Testing (S-20 and S-21)

Table 3.9-5: Proposed Project Annual GHG Emissions

Emission Source	Projected Annual Emissions (metric tons)				
	CO_2	CH_4	N_2O	SF_6	CO_2e
Construction	14,324.61	0.41	0.36	0.00	14,442.34
Amortized (20-year life)					**722.12**
O&M	**29.68**	**0.01**	**< 0.01**	**< 0.01**	**57.02**
Vehicle Use	0.02	0.00	0.00	0.00	0.02
Electricity Consumption	29.66	0.01	0.00	0.00	30.01
Fugitive SF_6 Losses	< 0.01	0.00	0.00	<0.01	26.99
Combined Amortized Construction and O&M Annual Emissions					**779.14**

3.9.3.4.2 Impact GHG-02: Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction, Operations and Maintenance

No Impact. To meet GHG reduction goals, CARB prepared the AB 32 Scoping Plan and provided updates to the plan in 2014, 2017, and 2022 to guide statewide GHG reduction strategies. The 2022 Scoping Plan is designed to reduce statewide anthropogenic GHG emissions in California by 85 percent as compared to the 1990 levels by 2045. SANDAG's PCAP includes actions that will significantly reduce GHG emissions, that can be implemented before 2030, and that benefit low-income and disadvantaged communities in the San Diego region. The County's CAP establishes nine strategies, 21 measures, and 70 actions that the County must take to reduce GHG emissions to 43.6 percent below 2019 levels and 85.4 percent below 2019 levels by 2030 and 2045, respectively. The City of El Cajon's Sustainability Initiative includes eight strategies aimed at achieving an overall reduction in the City's GHG emissions.

Electrification of day-to-day operations in land use development projects and industrial processes is a method that potentially can reduce fossil fuel (including gasoline or diesel) combustion because of the use of a less carbon-intensive energy source (depending on the source of electricity production). By increasing reliability of the Proposed Project Area's power system, existing electricity customers would have access to safe and reliable electricity. This reliable electricity source may then support additional electrification of customer operations, which in turn may result in reduced GHG emissions.

Improving the regional power system can also support existing or future renewable electric generation (e.g., wind, solar, hydro, and thermal), thereby potentially reducing the use of carbon-intensive energy sources. GHG emissions from the Proposed Project's O&M activities would be minimal, would generate approximately one vehicle trip per year for regular O&M activities, and would not involve a significant use of fossil fuels. SDG&E would continue to implement its

existing programs that aim at increasing energy efficiency and achieving carbon neutrality. As a result, the Proposed Project would be consistent with the goals of the 2022 Scoping Plan and would not conflict with the plan. No impact would occur.

3.9.4 References

California Natural Resources Agency. 2018. Safeguarding California Plan. Online. https://resources.ca.gov/CNRALegacyFiles/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf. Site visited May 2025.

CARB. 2017. 2017 Scoping Plan Documents. Online. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents. Site visited April 2025.

CARB. 2022. 2022 Scoping Plan Documents. Online. https://ww2.arb.ca.gov/resources/documents/2022-scoping-plan-documents. Site visited April 2025.

CARB. 2025. Current California GHG Emission Inventory Data. Online. https://ww2.arb.ca.gov/ghg-inventory-data. Site visited April 2026.

CEC. 2021. 2021 SB 100 Joint Agency Report: Achieving 100 Percent Clean Electricity in California: An Initial Assessment. Online. https://www.energy.ca.gov/publications/2021/2021-sb-100-joint-agency-report-achieving-100-percent-clean-electricity. Site visited April 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

City of El Cajon. 2020. Sustainability Initiative. Online. https://www.elcajon.gov/your-government/departments/city-manager/environmental-strategy. Site visited August 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County of San Diego. 2015. GHG Guidance. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/PDS2015GHG%20Guidance%20-1-21-15.pdf. Site visited April 2025.

County of San Diego. 2020. Alpine Draft Community Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/CommunityGroups/AlpineCommunityPlanUpdate.html. Site visited December 2025.

County of San Diego. 2024. 2024 Climate Action Plan. https://www.sandiegocounty.gov/content/sdc/sustainability/climateactionplan.html. Site visited May 2025.

FOCA. 2015. Guidance on the Determination of Helicopter Emissions. Online. https://www.bazl.admin.ch/dam/bazl/de/dokumente/Fachleute/Regulationen_und_Grundlagen/guidance_on_the_determinationofhelicopteremissions.pdf.download.pdf/guidance_on_the_determinationofhelicopteremissions.pdf. Site visited October 2025.

NOAA. 2012. Climate Change: Global Temperature Projections. Online. https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature-projections. Site visited April 2025.

SANDAG. 2024. San Diego Regional Priority Climate Action Plan. Online. https://www.sandag.org/projects-and-programs/environment/climate/regional-climate-action-planning. Site visited April 2025.

SANDAG. 2025a. San Diego Regional Climate Action Roadmap. Online. https://www.sandag.org/projects-and-programs/environment/climate/regional-climate-action-planning. Site visited April 2026.

SANDAG. 2025b. 2025 Regional Plan. Online. https://www.sandag.org/regional-plan. Site visited April 2026.

SDG&E. 2022. The Path to Net Zero: A Decarbonization Roadmap for California. Online. https://www.sdge.com/netzero. Site visited April 2026.

SDG&E. 2023. SDG&E's Sustainability Strategy. Online. https://www.sdge.com/more-information/environment/sustainability-approach#sustainable%20operations. Site visited April 2025.

U.S. EPA. 2024. Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases. Online. https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases. Site visited April 2025.

U.S. EPA. 2025a. Impacts of Climate Change. Online. https://www.epa.gov/climatechange-science/impacts-climate-change. Site visited May 2025.

U.S. EPA. 2025b. Sources of Greenhouse Gas Emissions. Online. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#electricity. Site visited April 2025.

U.S. EPA. 2025c. Climate Pollution Reduction Grants. Online. https://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants. Site visited June 2025.

3.10 HAZARDS AND HAZARDOUS MATERIALS

This section describes the existing conditions for hazards and hazardous materials in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.10.1 Environmental Setting

The environmental setting describes existing conditions, including hazardous materials, hazards, and sensitive receptors, and summarizes relevant federal, state, and local regulations.

3.10.1.1 Hazardous Materials

California Health and Safety Code (HSC) Section 25501 defines the term "hazardous material" as any material that, because of quality, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.

3.10.1.1.1 Hazardous Sites

A Corridor Study was prepared by Environmental Data Resources, Inc. (EDR) to review regulatory agency database listings to screen for nearby hazardous sites that may exist within the Proposed Project Area (EDR 2026). The Corridor Study, provided in Attachment 3.10-A: Corridor Study, was completed for the proposed 230 kV transmission line. Attachment 3.10-A: Corridor Study also provides maps detailing the sites identified in the records search.

Although 17 hazardous sites with previously reported releases are located within 1 mile of the proposed 230 kV transmission line or existing Suncrest Substation, all sites have either been closed, require no further action, or have a status that is unknown or not reported. Four of the sites have been closed or require no further action. The statuses of the other 13 sites are unknown or not reported. Based on the available information provided in the Corridor Study, none of the sites are active hazardous materials sites.[1] In addition, no hazardous sites were identified in the vicinity of the proposed staging yards.

3.10.1.1.2 Agricultural Chemicals

Agricultural and farming operations use agricultural chemicals, including pesticides and herbicides, as standard practice. The Proposed Project's 230 kV overhead (OH) segment would traverse land currently used for small-scale crop production between Poles 42 and 44 for approximately 0.15 mile. Residual concentrations of agricultural chemicals may be present in the soil from historical agricultural application and storage.

[1] An active hazardous materials site is a site where there has been an unauthorized release of hazardous materials to the environment and the site is currently undergoing investigation, undergoing cleanup, or is under active regulatory review to address the contamination.

3.10.1.2 Hazards

3.10.1.2.1 Airports and Airstrips

No active airports or private airstrips were identified within 2 miles of the Proposed Project. The nearest airport, Gillespie Field Airport, is approximately 4.2 miles northwest of the proposed 230 kV western underground segment and it is not within the safety zones established in the Gillespie Field Airport Land Use Compatibility Plan (ALUCP) (County of San Diego [County] Airport Land Use Commission 2010). The closest safety zone designated for Gillespie Field Airport is located approximately 2.7 miles northwest of the proposed 230 kV western underground segment. The second-nearest airport, the Montgomery-Gibbs Executive Airport, is approximately 13.3 miles northwest of the western terminus of the proposed 230 kV western underground segment and is not within any safety zones established in the Montgomery Field ALUCP (San Diego County 2010). The closest safety zone designated for Montgomery-Gibbs Executive Airport is located approximately 11 miles west of the proposed 230 kV western underground segment.

3.10.1.2.2 Wildland Fire Hazards

As discussed in Section 3.21 Wildfire, the California Public Utilities Commission (CPUC) High Fire Threat District (HFTD) classifications identify fire threat areas with a higher risk of fires associated with utilities. Tier 1 HFTDs are zones near communities, roads, and utility lines and can be a direct threat to public safety. Tier 2 HFTDs are areas of elevated risk from utility-related wildfires, and Tier 3 HFTDs are areas of extreme risk from utility-related wildfires (CPUC 2021). The Proposed Project is within both CPUC Tier 2 and Tier 3 HFTDs. As detailed in Section 3.21 Wildfire, Attachment 3.21-A: Wildfire Modeling Report, areas at risk within 1,000 feet of the Proposed Project include residential structures, existing transmission lines, critical habitat, and public roads that lack a secondary point of access or exit.

Also discussed in Section 3.21 Wildfire, the California Department of Forestry and Fire Protection (CAL FIRE) identifies Fire Hazard Severity Zones (FHSZs), which specify the risk of wildfires for all fire-prone areas in the state, regardless of land ownership or responsibility. The Board of Forestry and Fire Protection classifies lands into Fire Protection Responsibility Areas. The federal, state, and local responsibility areas determine who has financial responsibility for wildland fire protection and prevention in an area, and are summarized in the following:

- Federal Responsibility Areas (FRAs): The United States (U.S.) Forest Service (USFS) and the Department of Defense are financially responsible. FRA lands are usually national forests, wilderness areas, military bases, or other lands under the jurisdiction of the federal agencies listed.

- State Responsibility Areas (SRAs): CAL FIRE is financially responsible. Incorporated cities and federal ownership are excluded.

- Local Responsibility Areas (LRAs): The local government (e.g., city fire departments, fire protection districts, counties, and CAL FIRE under contract) is financially responsible. LRAs are incorporated cities, urban regions, agricultural lands, and some portions of the desert.

3.10.1.2.3 Facilities Potentially Susceptible to Induced Current

Existing infrastructure that may be susceptible to induced current is metallic in nature. Railways, bridges, pipelines, and power lines are all linear metallic infrastructure that were reviewed in the vicinity of the Proposed Project.

A review of the Federal Railroad Administration's Geographic Information System (GIS) data indicates no railroads are located within 1 mile of the Proposed Project (Federal Railroad Administration 2020). A review of the California Department of Transportation (Caltrans) GIS data indicates several bridges are located within 1 mile of the proposed 230 kV transmission line and the existing Suncrest Substation, which are identified in Table 3.10-1: Bridges within 1 Mile of the Proposed Project.

Table 3.10-1: Bridges within 1 Mile of the Proposed Project

Body of Water Crossed	Intersecting Street	Distance to Proposed Project (miles)
Peterson Canyon	Japatul Road	0.03
Harbison Canyon Creek	Collier Way	0.23
Sweetwater River	Japatul Road	0.30
Harbison Canyon Creek	Warfield Way	0.38
North Fork Sweetwater River	Dehesa Road	0.57
Harbison Canyon Creek	Noakes Street	0.76
Harbison Canyon Creek	Patrick Street	0.83

Source: Caltrans 2025

A review of the California Governor's Office of Emergency Services (Cal OES) GIS Data Hub and U.S. Department of Transportation (DOT) National Pipeline Mapping System indicates that no gas transmission, natural gas, or hazardous liquid pipelines are located within 1 mile of the Proposed Project. Existing SDG&E electrical infrastructure in the vicinity of the Proposed Project includes the following transmission lines:

- Transmission Line (TL) 625 (69 kV),
- TL6904 (69 kV),
- TL6914 (69 kV),
- TL6957 (69 kV),
- Sunrise Powerlink (500 kV), and
- TL23021 (230 kV).

3.10.1.3 Schools

Children are often more susceptible to long-term effects of exposure to emission of hazardous materials than adults. When children are at school, they spend an extended period in one location. As such, schools are considered sensitive receptors due to their vulnerability to hazardous air emissions and the accidental release that can occur from handling hazardous

materials, substances, and wastes. No schools were identified within 0.25 mile of the Proposed Project. The approximate distances from the nearest schools to the Proposed Project are listed in Table 3.10-2: Schools within 2 Miles of the Proposed Project. Schools in the vicinity of the Proposed Project are also summarized in Section 3.16 Public Services.

3.10.1.4 Emergency Response and Evacuation Plans

The County Office of Disaster Preparedness implements the San Diego County Operational Area (OA) Emergency Operations Plan (EOP). The OA consists of the County, 18 cities (including the City of El Cajon [City]), and all special districts, including school districts. The County and the 18 incorporated municipalities have established a formal joint powers relationship. The OA is staffed by the County's OES. OA staff coordinate with agencies within the County's boundaries and Cal OES. During a disaster response, the County's OES is responsible for activating the County's Emergency Operations Center and coordinating at the OA level. The County's OES is also responsible for collecting status reports and other information from organizations and facilities that may have sustained damage.

The San Diego County Operational Area Evacuation Annex (Annex) was designed to be used as a template for preparation of other jurisdictional evacuation plans and to supplement or support the evacuation plans developed and implemented by local jurisdictions. The Annex includes strategies, protocols, organizational frameworks, and recommendations that may be used to implement a coordinated evacuation effort within the OA. It identifies estimates on the resident population within each jurisdiction that may be potentially impacted by certain hazards and would require evacuation, the number of residents that may need assistance securing shelter or transportation, and the estimated number of household pets that may need to be accommodated in the event of an evacuation effort. Additionally, the Annex provides hazard-specific considerations, transportation routes, and capacities for general evacuation, shelter capacities throughout the county, locally available resources, resources available through mutual aid, and other special-needs considerations. The Annex includes hazard-specific evacuation routes for dam failure, earthquakes, tsunamis, floods, and wildfires. Major interstates, highways, and prime arterials within San Diego County are primary evacuation routes.

The City is served by the Heartland Fire Department, which has five fire stations. Heartland Fire Department coordinates with the East County Community Emergency Response Team to provide emergency services and fire prevention for local communities.

3.10.2 Regulatory Setting

3.10.2.1 Federal

3.10.2.1.1 U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) maintains a list of materials considered to be hazardous to the environment or to human health.

Table 3.10-2: Schools within 2 Miles of the Proposed Project

School Name	Location	Distance to Proposed Project (miles)
Crest Elementary School	2000 Suncrest Boulevard El Cajon, CA 92021	0.7
Boulder Oaks Elementary School	2320 Tavern Road Alpine, CA 91901	1.0
Shadow Hills Elementary School	8770 Harbison Canyon Road Alpine, CA 91901	1.4
Mountain View Learning Academy	8770 Harbison Canyon Road Alpine, CA 91901	1.4
Creekside Early Learning Center	8818 Harbison Canyon Road Alpine, CA 91901	1.4
Joan MacQueen Middle School	2001 Tavern Road Alpine, CA 91901	1.5
Granite Hills High School	1719 East Madison Avenue El Cajon, CA 92021	1.6
Rios Elementary School	14314 Rios Canyon Road El Cajon, CA 92021	1.8
Madison Avenue Elementary School	1615 East Madison Avenue El Cajon, CA 92021	1.9
Montgomery Middle School	1570 Melody Lane El Cajon, CA 92021	2.0

Source: California Department of Education 2025

Those materials are categorized as follows:

- F-List: Wastes from the F-List are published under Title 40, Section 261.31 of the Code of Federal Regulations (CFR). They include non-specific source wastes that are common in manufacturing and industrial processes.

- K-List: K-List wastes are published under Title 40, Section 261.32 of the CFR. They include source-specific wastes from particular industries, including pesticide manufacturing and petroleum refining.

- P-List and U-List: Wastes from the P-List and U-List are published under Title 40, Section 261.33 of the CFR. They include discarded commercial chemical products in an unused form (U.S. EPA 2024a).

Waste that has not been previously listed may still be considered hazardous if it exhibits one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity (CFR 2025a).

3.10.2.1.2 Resource Conservation and Recovery Act

Under the Resource Conservation and Recovery Act (RCRA) of 1976 (42 U.S. Code [U.S.C.] § 6901 et seq.), individual states may implement their own hazardous waste programs in lieu of the RCRA as long as the state program is at least as stringent as the federal RCRA requirements. The RCRA regulates hazardous waste from the time that waste is generated until its final disposal through management, storage, transport, and treatment. The federal government approved California's RCRA program, called the Hazardous Waste Control Law, in 1992. In California, the RCRA program is administered by the Department of Toxic Substance Control (DTSC) under the direction of the U.S. EPA.

3.10.2.1.3 Comprehensive Environmental Response, Compensation, and Liability Act and Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601 et seq.), along with the Superfund Amendments and Reauthorization Act (SARA) (40 CFR § 68.110 et seq.), set the rules for how hazardous materials are managed—covering their use, emergency planning, reporting, and cleanup, as well as how releases into the environment must be handled.

Annual reporting of hazardous material releases—whether routine or accidental—is required under Title 42, Section 11023 and Title 40, Section 372.30 of the U.S.C. Additionally, Title III of SARA, also known as the Emergency Planning and Community Right-To-Know Act of 1986, mandates that each state create and maintain local emergency response plans and provide public access to information about hazardous substances used in nearby facilities (U.S. EPA 2024b and U.S. EPA 2024c).

3.10.2.1.4 Disaster Mitigation Act of 2000

The Disaster Mitigation Act of 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act to create a framework for state, local, tribal, and territorial

governments to plan for hazard mitigation and receive non-emergency disaster relief (Federal Emergency Management Agency [FEMA] 2023). The following is the intent of a hazard mitigation plan:

- gather hazard, vulnerability, and mitigation information from the local level for use in state-level planning;
- ensure that state and local hazard mitigation planning is coordinated to the greatest extent practical; and
- ensure that local jurisdictions are made aware of the hazards and vulnerabilities within their jurisdiction and to develop strategies to reduce those vulnerabilities (Cal OES 2023a).

California's 2023 State Hazard Mitigation Plan (SHMP) is the state's primary hazard mitigation guidance document (Cal OES 2023a). The 2023 SHMP continues to build upon the state's commitment to reduce or eliminate potential risks and impacts of natural and human-caused disasters to help communities with their mitigation and disaster resiliency efforts. The 2023 SHMP includes an updated statewide risk assessment, disaster history, and statistics; recent mitigation progress, success stories, and best practices; updated state hazard mitigation goals, objectives, and strategies; and updated climate mitigation progress and adaptation strategies. The 2023 SHMP will expire on August 29, 2028.

3.10.2.1.5 Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) (15 U.S.C. § 2601 et seq.), passed in 1976, gives the U.S. EPA the authority to oversee and regulate the reporting, recordkeeping, testing, and use of chemical substances and mixtures. TSCA rules cover the production, import, use, and disposal of certain chemicals, including polychlorinated biphenyls, asbestos, radon, and lead-based paint. The law also requires the U.S. EPA to maintain the TSCA Inventory—a comprehensive list of approximately 85,000 chemical substances that are manufactured or processed in the U.S. for purposes regulated under the TSCA (U.S. EPA 2024d).

3.10.2.1.6 Clean Water Act and Clean Air Act

The Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.) and the Clean Air Act (CAA) (42 U.S.C. § 7401 et seq.) include regulations to help prevent accidental releases of hazardous materials into surface water in the case of the CWA, and into the air under the CAA. As part of the CWA, specific requirements were created for Spill Prevention, Control, and Countermeasure Plans, which are detailed in Title 40, Part 112 of the CFR and focus on oil spill prevention. For the CAA, regulations related to controlling hazardous air pollutant releases are outlined in Title 40, Part 68 of the CFR (U.S. EPA 2024e and U.S. EPA 2024f).

3.10.2.1.7 Occupational Health and Safety Act

The Occupational Safety and Health Administration (OSHA) is the federal agency responsible for protecting workers' health and safety, especially when it comes to handling chemicals, under the Occupational Safety and Health Act of 1970. OSHA has issued a wide range of regulations, found in Title 29 of the CFR, that establish safety standards for workplaces and work practices.

These include rules for working with hazardous materials, as well as for excavation and trenching activities.

One key regulation is the Hazard Communication Standard (29 CFR Part 1910), which requires that workers be made aware of the risks tied to the substances with which they work. Employers must provide training on how to safely handle hazardous materials, use emergency equipment, and follow emergency response procedures. In addition, all containers must be clearly labeled, and material safety data sheets must be readily accessible at the worksite (U.S. Department of Labor 2004).

3.10.2.1.8 Federal Hazardous Materials Transportation Law

The U.S. DOT oversees the interstate transport of hazardous materials and is responsible for protecting the public from the risks involved. The main law governing this is the Federal Hazardous Materials Transportation Law (49 U.S.C. 5101 et seq.), which was previously known as the Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.). This law sets requirements for anyone involved in offering or receiving hazardous waste for transport, including registration. It also mandates that hazardous materials be correctly classified, described, packaged, labeled, and marked. Enforcement of these regulations is carried out by several federal agencies, including the Federal Highway Administration, U.S. Coast Guard, Federal Railroad Administration, and Federal Aviation Administration (FAA) (U.S. DOT 2021).

3.10.2.1.9 Code of Federal Regulations

Title 14, Part 77 Safe, Efficient Use, and Preservation of the Navigable Airspace

The FAA oversees all airports and navigable airspace in the U.S., except those managed by the Department of Defense. According to Title 14, Part 77 of the CFR, certain construction projects must notify the FAA if they could impact navigable airspace. This includes any structure taller than 200 feet or any project that extends upward at a slope greater than 100-to-1 (horizontal to vertical) from the end of a public or military airport runway longer than 3,200 feet up to a distance of 20,000 feet. For runways 3,200 feet or shorter, notification is required for projects that rise at a slope greater than 50-to-1 within 10,000 feet of the runway (CFR 2025b).

Title 14, Section 133.33 Operating Rules

Title 14, Section 133.33(d) of the CFR states the following regarding rotor craft external-load operations over congested areas:

> "Notwithstanding the provisions of part 91 of this chapter, the holder of a Rotorcraft External-Load Operator Certificate may conduct (in rotorcraft type certificated under and meeting the requirements of part 27 or 29 of this chapter, including the external-load attaching means) rotorcraft external-load operations over congested areas if those operations are conducted without hazard to persons or property on the surface and comply with the following:
>
> (1) The operator must develop a plan for each complete operation, coordinate this plan with the responsible Flight Standards office for the area in which the operation will be conducted, and obtain approval for the operation from that office. The plan must include an agreement with the appropriate political subdivision that local

officials will exclude unauthorized persons from the area in which the operation will be conducted, coordination with air traffic control, if necessary, and a detailed chart depicting the flight routes and altitudes.

(2) Each flight must be conducted at an altitude, and on a route, that will allow a jettisonable external load to be released, and the rotorcraft landed, in an emergency without hazard to persons or property on the surface" (CFR 2025c).

3.10.2.2 State

3.10.2.2.1 Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (Title 27 California Code of Regulations [Cal. Code Regs.]) was mandated by the state of California in 1993. The Unified Program was created to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for six hazardous materials programs. The program has the following six elements:

- Hazardous Waste Generators and Hazardous Waste On-Site Treatment,
- Underground Storage Tanks,
- Aboveground Petroleum Storage Act Program,
- Hazardous Materials Release Response Plans and Inventories,
- California Accidental Release Prevention, and
- Uniform Fire Code Hazardous Materials Management Plans and Hazardous Materials Inventory Statements (Westlaw 2024).

At the local level, implementation of a Unified Program is accomplished by identifying a Certified Unified Program Agency (CUPA) that coordinates all of these activities to streamline the process for local businesses. The County Department of Environmental Health and Quality's Hazardous Materials Division is approved by the California Environmental Protection Agency (CalEPA) as the CUPA for San Diego County (County of San Diego Department of Environmental Health and Quality 2025).

3.10.2.2.2 Carpenter-Presley-Tanner Hazardous Substance Account Act

The Carpenter-Presley-Tanner Hazardous Substance Account Act (HSAA) (California HSC § 25300 et seq.) is California's equivalent to CERCLA (State of California 2023). The Carpenter-Presley-Tanner HSAA addresses hazardous waste sites and apportions liability for them. The Carpenter-Presley-Tanner HSAA also states that owners are responsible for the cleanup of such sites and the removal of toxic substances, where possible. The two state agencies with primary responsibility for enforcing federal and state regulations related to hazardous material transport and responding to hazardous materials transportation emergencies are the California Highway Patrol and Caltrans, respectively. Assembly Bill (AB) 2327, signed into law in September 2022, requests the California Law Revision Commission to recommend revisions to the Carpenter-Presley-Tanner HSAA to improve the organization and expression of law. Pursuant to this request, the commission has made recommendations for the recodification of the Carpenter-Presley-Tanner HSAA. The statute will make changes to provisions of law that

reference the act or provisions in the act. The statute became operative on January 1, 2024, along with the recodification of the Carpenter-Presley-Tanner HSAA (State of California 2022).

3.10.2.2.3 Assembly Bill 38

Under AB 38, the California Emergency Management Agency (Cal EMA) was formed January 1, 2009 as the result of a merger between the Cal OES and the Office of Homeland Security (Cal OES 2019). In 2013, the Governor's Reorganization Plan #2 restored Cal EMA to the Governor's Office, renamed it Cal OES, and merged it with the Office of Public Safety Communications (Cal OES 2023b). The Hazardous Materials Division of Cal OES coordinates the statewide implementation of hazardous materials accident prevention and emergency response programs for hazardous materials incidents and threats (Cal OES 2023c).

3.10.2.2.4 Hazardous Materials Release Response Plans and Inventory Act of 1985

The Hazardous Materials Release Response Plans and Inventory Act, also known as the Hazardous Materials Business Plan (HMBP), aims to prevent or minimize harm to public health and safety and the environment from a release or threatened release of hazardous material. A HMBP contains detailed information that includes the following:

- an inventory of hazardous materials at a facility;
- emergency response plans and procedures to be followed in the event of a reportable release or threatened release of a hazardous material;
- requirements to train employees in safety procedures in the event of a release or threatened release of a hazardous material, including onboarding for new employees and annual refresher courses for existing employees; and
- a site map that depicts north orientation, loading areas, internal roads, adjacent streets, storm and sewer drains, access and exit points, emergency shutoffs, evacuation staging areas, hazardous material handling and storage areas, and emergency response equipment.

The CalEPA oversees the implementation of the HMBP program at the state level. CUPAs and Participating Agencies implement the program at the local level and are responsible for enforcement and administration in their respective jurisdictions (CalEPA 2025a).

3.10.2.2.5 California Government Code Section 65962.5

The DTSC, a division of CalEPA, is required under California Government Code Section 65962.5 to compile and submit a list of the following: all hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the California HSC, all land designated as hazardous waste or border zone property, all information received by the DTSC on hazardous waste disposals on public land, and all sites listed pursuant to Section 25242 of the California HSC (Findlaw 2023a). The hazardous waste facilities identified in California HSC Section 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order

issued under HSC Section 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment (CalEPA 2025b).

3.10.2.2.6 Portor-Cologne Water Quality Control Act

As discussed in more detail in Section 3.11 Hydrology and Water Quality, the Porter-Cologne Water Quality Control Act (California Water Code, Division 7) is the provision of the California Water Code that regulates water quality in California and authorizes the nine Regional Water Quality Control Boards (RWQCBs) to implement and enforce the regulations. Through the Porter-Cologne Water Quality Control Act and the National Pollutant Discharge Elimination System, the RWQCBs have the authority to require proper management of hazardous materials during project construction. California's RWQCBs require a Construction Activities Storm Water General Permit (Order 2009-12 0009-DWQ) for stormwater discharges associated with any construction activity (including clearing, grading, excavation reconstruction, and dredge and fill activities) that results in the disturbance of 1 acre or more of total land area. The Porter-Cologne Water Quality Control Act provides several means of enforcement, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecution. The Proposed Project Area is under the jurisdiction of the San Diego RWQCB (Region 9) (State Water Resources Control Board [SWRCB] 2025).

3.10.2.2.7 California Health and Safety Code, Division 20, Chapter 6.5

The California Hazardous Waste Control Law (California HSC § 25100 et seq.) addresses the control of hazardous waste for the state by regulating generators of universal waste as classified under the RCRA, as well as hydrocarbon waste (e.g., oils, lubricants, and greases) that is not classified as hazardous waste under the RCRA. The DTSC is responsible for the administration and enforcement of the Hazardous Waste Control Law.

The Hazardous Waste Fee HSC (HSC § 25143 et seq.) provides guidance and definitions on wood waste and its disposal. Wood waste includes poles, cross-arms, pilings, fence posts, lumber, support timbers, flume lumber, and cooling tower lumber. Any wood waste that has been removed from electric, gas, or telephone service is exempt from the requirements of this chapter if the following conditions are met:

- the wood waste is not subject to regulation as a hazardous waste under the federal act,
- the wood waste is disposed of in a compose-line portion of a municipal solid waste landfill, and
- the solid waste landfill used for disposal is authorized to accept wood waste under waste discharge requirements issued by a California RWQCB (SWRCB 2023a).

3.10.2.2.8 California Occupational Safety and Health Act of 1973

The California Occupational Safety and Health Act of 1970 established the California Occupational Safety and Health Administration (Cal/OSHA) and was enacted to assure safe and healthful working conditions. Cal/OSHA regulations are primarily presented in Title 8 of the Cal. Code Regs. Cal/OSHA is responsible for enforcing the occupational and public safety laws adopted by OSHA; OSHA is responsible for the regulation of workplace hazards and hazardous materials at the federal level, while Cal/OSHA regulates hazards and hazardous materials at the state level.

3.10.2.2.9 California Code of Regulations Title 24 Part 9

The 2019 California Fire Code is presented in the regulations set forth in Title 24 Cal. Code Regs. Part 9 and is based on the International Fire Code from the International Code Council (ICC). The California Fire Code contains consensus standards related to establishing good practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, and dangerous conditions in new or existing buildings, structures, and premises (ICC Digital Codes 2019).

3.10.2.2.10 California Public Resources Code Sections 4201-4204

California Public Resources Code Sections 4201 to 4204 require the following:

- Classification of lands within SRAs in accordance with the severity of fire hazard present for the purpose of identifying measures to be taken to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property (Findlaw 2023b).

- Classification of lands within SRAs into FHSZs. Each zone will embrace relatively homogeneous lands and be based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by CAL FIRE as a major cause of wildfire spread (Findlaw 2023c).

- Designation of FHSZs and assignation to each zone a rating reflecting the degree of severity of fire hazard that is expected to prevail in the zone (Findlaw 2023d).

- Periodic review of zones designated and, as necessary, the revision of zones or their ratings or repeal the designation of zones (Findlaw 2023e).

3.10.2.2.11 California Public Utilities Commission Standards

General Order 128

General Order (GO) 128 outlines the standards for building, operating, and maintaining underground electric supply and communication systems regulated by the CPUC. GO 128 is designed to ensure these systems are safely designed and operated, and it includes specific guidelines for both their layout and inspection processes (CPUC 2024a).

California Public Utilities Commission Fire Safety Rulemaking Background

In October 2007, devastating wildfires driven by strong Santa Ana winds burned hundreds of square miles in southern California. Several of the worst wildfires were reportedly ignited by OH utility power lines and aerial communication facilities in close proximity to power lines. In response to these wildfires, the CPUC initiated Rulemaking (R.) 08-11-005 to consider and adopt regulations to protect the public from potential fire hazards associated with OH power line facilities and nearby aerial communication facilities.

Beginning in 2009, the CPUC issued several decisions in R.08-11-005 that together adopted dozens of new fire safety regulations. Most of the adopted fire safety regulations consisted of new or revised rules in GO 95 (CPUC 2024b). Several of the adopted fire safety regulations

apply only to high fire threat areas, or areas where an elevated risk for power line fires igniting and spreading rapidly exists. These high fire threat areas are designated by several maps that were adopted on an interim basis. Each of the interim maps covers a different part of the state and uses its own methodology for identifying high fire threat areas, presenting consistency and potential enforcement issues. To address these issues, the CPUC also commenced the development of a single statewide fire threat map to designate areas where there is an elevated risk for destructive power line fires and where stricter fire safety regulations should apply.

In May 2015, the CPUC closed R.08-11-005 and initiated its successor, R.15-05-006, to complete the outstanding tasks in R.08-11-005. The general scope of R.15-05-006 was to address the development and adoption of a statewide fire threat map that delineates the boundaries of a new HFTD where the previously adopted regulations would apply and to determine the need for additional fire safety regulations in the HFTD. In addition, R.15-05-006 was intended to revise GO 95 to include a definition and maps of the HFTD, as well as any new fire safety regulations. The scope and schedule for R.15-05-006 was divided into two parallel tracks. One track focused on the development and adoption of a statewide fire threat map, while the second track focused on the identification, evaluation, and adoption of fire safety regulations in the HFTD.

On December 21, 2017, the CPUC issued Decision 17-12-024 to adopt regulations to enhance fire safety in the HFTD, effectively completing the second track of R.15-05-006. On January 19, 2018, the CPUC adopted the final CPUC Fire-Threat Map (CPUC 2021). The adopted CPUC Fire-Threat Map, together with the map of Tier 1 High Hazard Zones (HHZs) on the USFS-CAL FIRE joint map of tree mortality HHZs, comprise the HFTD Map where stricter fire safety regulations apply.

California Fire Code

The California Fire Code (Title 24 Cal. Code Regs. Part 9) is based on the International Fire Code from the ICC and contains consensus standards related to establishing good practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new or existing buildings, structures, and premises (California Building Standards Commission 2022).

Title 24 Cal. Code Regs. Part 9 outlines requirements for the Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) of the Unified Program. The HMMP and HMIS provide vital facility chemical and emergency response information to regulators, first responders, and the public. Facilities storing greater than 500 pounds of solids, 55 gallons of liquids, or 200 cubic feet at Normal Temperature and Pressure (NTP) of compressed gases must prepare and submit an HMMP per the requirements in Title 24 Cal. Code Regs. Part 9. Facilities that store 500 pounds of solids or less, 55 gallons of liquids or less, or 200 cubic feet at NTP of compressed gas or less are permitted to file a short-form HMMP in accordance with the components outlined in Title 24 Cal. Code Regs. Part 9. An HMIS is required for each building and each exterior facility where hazardous materials are stored.

3.10.2.3 Local

3.10.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan lists the following goals and policies that pertain to the Proposed Project concerning the mitigation of hazards and hazardous materials throughout its jurisdiction (County of San Diego 2011):

- **Policy COS 11.7: Undergrounding Utilities.** Require new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

- **Goal S-13: Controlled Hazardous Materials Exposure.** Limit human and environmental exposure to hazardous materials that pose a threat to human lives or environmental resources.

- **Policy S-13.2: Industrial Use Restrictions.** Restrict industrial uses that store, process, or transport significant amounts of hazardous materials to areas designated as High Impact Industrial.

- **Policy S-13.3: Hazards-Sensitive Uses.** Require that land uses using hazardous materials be located and designed to ensure sensitive uses, such as schools, hospitals, daycare centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.

Alpine Community Plan

The Safety section of the Draft Alpine Community Plan contains the following goals and policies related to hazards and hazardous materials that pertain to the Proposed Project (County of San Diego 2020):

- **Goal S-1.** Promote the establishment of emergency procedures and preventative measures to minimize damage from fire, geologic hazards, crime occurrence, and hazardous substances.

- **Policy S-1.1.** Maintain continued support of the Community Wildfire Protection Plan (CWPP) and the Greater Alpine Fire Safe Council.

- **Policy S-1.2.** Encourage development with fire preventive development practices and fire-resistant plant types.

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The County of San Diego revised Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), adopted in 2023, provides strategies and mitigation actions for long-term, cost-effective solutions to reduce natural and human-caused hazard impacts. The MJHMP lists the following goals and

associated objectives that pertain to the Proposed Project concerning wildfire risk and mitigation throughout its jurisdiction (County of San Diego 2023):

- **Goal 1.** Foster safe, sustainable, and thriving environments.
- **Objective 1.** Promote hazard-resistant future developments and enhance operational resources.
- **Goal 2.** Reduce the possibility of damages and losses to existing assets (such as people, critical facilities/infrastructures, and county-owned facilities).
- **Objective 2.** Develop and/or enhance comprehensive all hazard mitigation policies, plans, technologies, and services.

San Diego County Operational Area Emergency Operations Plan

The San Diego County OA EOP provides a coordinated framework for managing emergencies and disasters across the County and its 18 incorporated cities. Developed by the Unified San Diego County Emergency Services Organization, the plan aligns with the Standardized Emergency Management System and the National Incident Management System, ensuring compliance with state and federal protocols. It defines roles, responsibilities, and lines of authority for all participating jurisdictions and agencies and enables an integrated, scalable response to a wide range of hazards, including wildfires, earthquakes, terrorism, and mass-casualty incidents.

The plan consists of a Basic Plan and 16 functional Annexes addressing critical areas such as fire and law enforcement mutual aid, public health, emergency sheltering, environmental health, logistics, evacuation, and emergency public information. It supports resource coordination through the OA Emergency Operations Center and promotes mutual aid, interagency communication, and continuity of operations. Designed for flexibility and periodic updates, the OA EOP serves as both a regional coordination guide and a foundational template for individual jurisdictions to develop or refine their local emergency plans (County of San Diego 2022).

County of San Diego Alpine Evacuation and Protection Plan

The County's Alpine Evacuation and Protection Plan was published in 2006 and outlines various community protection and evacuation plans, mitigation strategies, response plans, and emergency services for the unincorporated community of Alpine. The Alpine Evacuation and Protection Plan details the following information:

- a community overview and history of wildfires;
- mitigation strategies;
- community protection and evacuation plans;
- response plans and resources for fire agencies, law enforcement, animal services, mass casualty, and medical, and emergency services;
- shelters and fire safe zones;
- fire protection by geographic sub-region; and
- a vegetation management program.

3.10.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals and policies that pertain to the Proposed Project concerning hazards and hazardous materials were identified (City of El Cajon 2000).

3.10.3 Impact Analysis and Mitigation Measures

3.10.3.1 Analysis Methodology

Potential impacts resulting from hazards and hazardous materials were determined based on information summarized in Section 3.10.1 Environmental Setting that was obtained from reviews of:

- EDR reports (EDR 2026);
- the SWRCB GeoTracker website (SWRCB 2023a);
- the DTSC EnviroStor website (DTSC 2025);
- Cal OES websites (Cal OES 2019, 2021, 2023a, 2023b, 2023c);
- CAL FIRE data (CAL FIRE 2025);
- the San Diego County General Plan (County of San Diego 2011) and MJHMP (County of San Diego 2023);
- the City of El Cajon General Plan (City of El Cajon 2000); and
- emergency evacuation and response plans for the County (County of San Diego 2022).

3.10.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to hazards and hazardous materials.

3.10.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For hazards and hazardous materials, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

- Be located on a site that is included on a list of hazardous material sites, compiled pursuant to California Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

3.10.3.4 Impact Analysis

3.10.3.4.1 Impact HAZ-01: Would the project create a risk to the public or the environment from the routine use, transport, storage, and disposal of hazardous materials?

Construction

Less-than-Significant Impact. Construction of the Proposed Project would require the use of fuel and lubricants inside vehicles and equipment. Use of these hazardous materials during construction may pose health and safety hazards to construction workers, nearby residents, and the environment surrounding the Proposed Project. Potential impacts from the use of hazardous materials are generally associated with the following:

- spills or other unauthorized releases during Proposed Project activities, such as vegetation trimming;
- construction of new structures, including excavation and pole setting;
- installation of new duct bank; and
- conductor and cable installation and splicing.

A release of hazardous materials could also occur during construction at temporary storage sites, transportation of materials or workers to work sites, or during the refueling or servicing of equipment. Vehicles and equipment used for construction may contain or require temporary, short-term use of potentially hazardous substances, such as fuel, lubricating oils, or hydraulic fluid. A typical list of the types of hazardous materials used during construction is provided in Table 3.10-3: Hazardous Materials Typically Used During Construction. Due to the limited amount of these materials that would be required, impacts associated with a large release that could affect the local environment are not anticipated. While fuel trucks would be used on site, the likelihood of a major spill from their use is low. Refueling of equipment and vehicles would typically take place at staging yards. Fuels and hazardous materials kept at these locations would be stored within secondary containment to minimize potential releases. In addition, SDG&E construction crews would keep spill kits on site for use in the event of a spill, in accordance with SDG&E's Water Quality Construction Best Management Practices (BMPs) Manual (BMP Manual), which is included as Attachment 3.10-B: Water Quality Construction Best Management Practices.

Table 3.10-3: Hazardous Materials Typically Used During Construction

Hazardous Materials	
ABC fire extinguisher	Gasoline treatment
Acetylene gas	Hot stick cleaner (cloth treated with polydimethylsiloxane)
Air tool oil	Hydraulic fluid
Ammonium hydroxide	Insecticide (1,1,1-trichloroethene)
Antifreeze (ethylene glycol)	Insulating oil (inhibited, non-polychlorinated biphenyl)
Automatic transmission fluid	Lubricating grease
Battery acid (in vehicles)	Mastic coating
Bottled oxygen	Methyl alcohol
Brake fluid	Motor oils
Canned spray paint	Paint thinner
Chain lubricant (contains methylene chloride)	Propane
Connector grease (penotox)	Puncture seal tire inflator
Contact Cleaner 2000 (precision aerosol cleaner)	Safety fuses
Diesel de-icer	Starter fluid
Diesel fuel	Two-cycle oil (contains distillates and hydro-treated heavy paraffinic)
Diesel fuel additive	WD-40
Eyeglass cleaner (contains methylene chloride)	ZEP (safety solvent)
Gasoline	ZIP (1,1,1-trichloroethane)

Materials that are excavated, transported, stored, or disposed of during construction of the Proposed Project have the potential to contain hazardous compounds and could present a hazard to construction workers, the public, or the environment if improperly managed. Excavation would be required during trenching and the installation of duct banks, vaults, poles, guard structures, and lattice steel towers.

All non-hazardous materials encountered during excavation activities would be transported to a landfill. Should hazardous materials be encountered, SDG&E would transport these materials to an appropriately permitted and approved disposal facility. As described in Section 3.20 Utilities and Service Systems, Sycamore Landfill would likely be used for the disposal of hazardous waste. Should groundwater be encountered during excavation activities, the procedures described in Section 2.6.6 Water Use and Dewatering in Methods in Chapter 2 – Project Description regarding groundwater discharge would be followed.

As presented in Section 3.10.2 Regulatory Setting, several laws, rules, and regulations apply to the routine use of hazardous materials during construction, which include proper handling and disposal of hazardous materials. SDG&E would comply with all such laws, rules, and regulations. All spills would be immediately cleaned up and disposed of in accordance with SDG&E's BMP Manual. Construction would require only small amounts of hazardous materials, and the transport of these materials would primarily occur during the approximately 5-year construction period. In addition, SDG&E's standard Worker Environmental Awareness Program (WEAP) would include training on hazardous material protocols and BMPs. Therefore, construction crews would be prepared to respond to spills and properly store and dispose of hazardous materials. With adherence to applicable laws and regulations, implementation of SDG&E's BMP Manual, and provision of WEAP training, construction impacts resulting from hazards and hazardous materials would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. O&M activities for the Proposed Project would be conducted in the same manner as they were prior to construction of the Proposed Project. As described in Chapter 3 – Project Description, SDG&E's facilities would continue to be unmanned during operations and monitored remotely and the existing Suncrest Substation would continue to be operated by SDG&E's Skills/Mission Control Center in the Community of Serra Mesa.

The majority of the chemicals used for ongoing O&M activities would be similar to those used during the construction phase; however, the daily use of such chemicals would generally be considerably less during O&M activities relative to construction activities. All materials used during O&M would be applied, stored, and disposed of by licensed professionals and in accordance with applicable regulations and manufacturer recommendations. In addition, O&M at the existing Suncrest Substation would be conducted in accordance with the HMMP for the substation, in accordance with Title 24 Cal. Code Regs. Part 9. Implementation of standard operational BMPs consistent with the HMMP would further reduce potential hazards to the public or the environment. BMPs include maintaining spill kits, avoiding the storage of hazardous materials on or near work areas, storing hazardous materials within secondary containment, and fueling and servicing vehicles off site. With the implementation of these standard practices and regulatory requirements, O&M impacts due to hazards and hazardous materials would be less than significant.

3.10.3.4.2 Impact HAZ-02: Would the project create a risk to human health and the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials?

Construction

Less-than-Significant Impact. As discussed in the response to Impact HAZ-01, the transport, use, and disposal of hazardous materials could potentially result in an inadvertent spill or leak during construction of the Proposed Project. However, only small amounts of hazardous materials would be used during the approximately 5 years of construction. In addition, the results of the Corridor Study revealed no known contaminated sites or existing contamination in the vicinity of the Proposed Project (EDR 2026).

SDG&E would implement its standard BMPs and maintain spill kits on site to minimize the potential for spills and respond to potential releases of hazardous materials. In addition, implementation of the WEAP would provide construction personnel with training regarding the application of BMPs and compliance with federal and state regulations. Construction of the Proposed Project would be subject to the laws and regulations governing the handling and disposal of hazardous materials, and SDG&E would adhere to all relevant local, state, and federal regulations during the handling and disposal of hazardous materials. Therefore, impacts resulting from a potential spill of hazardous materials would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. As discussed in the response to Impact HAZ-01, O&M activities would be conducted in the same manner as they were prior to construction of the Proposed Project. Based on the existing infrastructure in the Proposed Project Area, post-construction O&M requirements are not anticipated to significantly increase or result in an increased use of hazardous materials. Vehicles and equipment that would be used to maintain Proposed Project facilities may contain materials that could constitute a hazardous substance if released into the environment; however, the use of such chemicals would typically be considerably less than those used during Proposed Project construction activities. To reduce the potential for adverse effects to occur, SDG&E would maintain spill kits in maintenance vehicles and continue to implement its HMMP, as required by law, to prevent or address any accidental release of hazardous materials. Because O&M activities would be conducted in the same matter as they were prior to construction, no new impacts would result from reasonably foreseeable upset or accident conditions during O&M of the Proposed Project. Therefore, O&M impacts would be less than significant.

3.10.3.4.3 Impact HAZ-03: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

Construction, Operations and Maintenance

No Impact. The Proposed Project components would not be located within 0.25 mile of an existing or proposed school. Therefore, no impact would occur.

3.10.3.4.4 Impact HAZ-04: Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to

Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Construction, Operations and Maintenance

No Impact. According to the EDR Corridor Study and a review of the GeoTracker and EnviroStor databases, the Proposed Project would not be located on a known hazardous site with an existing or past release. Therefore, no impact would occur.

3.10.3.4.5 Impact HAZ-05: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Construction, Operations and Maintenance

No Impact. The Proposed Project components would not be located within 2 miles of a public airport of the boundaries of an airport land use plan. Therefore, no impact would occur.

3.10.3.4.6 Impact HAZ-06: Would the project impair or interfere with an adopted emergency response plan or emergency evacuation plan?

Construction

Less-than-Significant Impact. An impact to emergency response or emergency evacuation plans could occur if construction of the Proposed Project hindered ingress and egress, altered emergency response times, or prevented the implementation of the emergency response or evacuation plans. Construction of the Proposed Project components would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. As described in Section 3.10.2 Regulatory Setting, the San Diego County EOP and MJHMP serve as guidance for responding to large-scale disasters and extraordinary emergency situations. The San Diego County General Plan Safety Element designates major freeways and state routes as potential evacuation routes. The closest major freeway is Interstate (I-) 8, which is located 1 to 3 miles north of the proposed 230 kV transmission line. One staging yard is located adjacent to the west of I-8 on the southwest corner of East Main Street and Greenfield Drive. However, construction equipment and vehicles would utilize Greenfield Drive to access Proposed Project components and avoid the use of I-8. Therefore, the Proposed Project would not cross any interstates that could potentially be used as evacuation routes.

The Safety Element of the San Diego County General Plan identifies La Cresta Road and Mountain View Road as potential evacuation routes, and both roads would likely require lane closures for the construction of the proposed 230 kV western UG segment. As discussed in Section 3.18, Transportation, SDG&E would implement MM TRA-01, which requires SDG&E to prepare a Traffic Control Plan and notify emergency service providers prior to the commencement of construction activities that require lane closures. Temporary closures would also be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. It is anticipated that these permits would require the application of appropriate traffic control measures and implementation of a traffic control plan during this work so that potential changes to emergency service ratios

would be minimized and ingress and egress would be maintained. Therefore, impacts would be less than significant.

As described in Section 3.16 Public Services, the Proposed Project components would have no impact on service ratios, response times, or other objectives for public services in the area. Fire, emergency, and police services currently serve, and would continue to serve, the areas where the new Proposed Project facilities would be located. In addition, anticipated lane closures would not occur along any of the evacuation routes identified in the County's Alpine Evacuation and Protection Plan (County of San Diego 2006). Based on the acquisition of applicable encroachment permits and the implementation of traffic control measures, the Proposed Project would not conflict with emergency evacuation or response plans. As a result, potential impacts during construction would be less than significant.

Operations and Maintenance

No Impact. As previously discussed, O&M activities would be conducted in the same manner as they were prior to construction of the Proposed Project. Routine maintenance activities would likely not impair the implementation of or physically interfere with EOPs due to the small crew size and frequency of dispatch. O&M of the new underground facilities that would be installed as part of the new transmission line may require temporary lane closures. However, these lane closures would be short in duration (i.e., typically 45 minutes or less) and would not deviate from the maintenance of existing or proposed underground facilities in the area. All required traffic control measures would be implemented in accordance with applicable encroachment permits, and emergency vehicles would be provided access during potential lane closures caused by maintenance activities. Therefore, no impact would occur during O&M.

3.10.3.4.7 Impact HAZ-07: Would the project expose people or structures to a significant risk of loss, injury, or death from wildland fires?

Construction

Less-than-Significant Impact. Because the Proposed Project would be located within both Tier 2 and Tier 3 HFTDs, construction personnel could be exposed to a wildland fire during construction. Risk to personnel would most likely come from the inability to avoid or escape a wildland fire. Lane closures associated with the installation of the transmission line would be limited and of short duration (i.e., typically 15 minutes or less). As previously discussed, temporary lane closures during construction would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process.

As discussed in Section 3.21 Wildfire, vehicles and equipment would not be staged or parked on vegetation. Vegetation identified as a fire hazard would either be cleared and removed or chipped and spread on site. Cleared vegetation would be disposed of in accordance with instructions from applicable agencies and/or landowners. Standard fire prevention protocols would be implemented during construction activities in compliance with applicable laws and regulations. In addition, SDG&E would implement its existing Operations and Maintenance Wildland Fire Prevention Plan, which is provided Section 3.21 Wildfire. This plan includes requirements for carrying emergency fire suppression equipment, conducting "tailboard meetings" that cover fire safety discussions, implementing procedural requirements for construction within fire threat zones, restricting smoking and idling vehicles, and implementing

restrictions during Red Flag Warnings. Based on the implementation of the practices and plans described in this section, potential impacts from wildland fires would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. As previously discussed, O&M activities would be conducted in the same manner as they were prior to construction of the Proposed Project. The Proposed Project may pose a fire hazard if vegetation or other obstructions are ignited by vehicles or equipment utilized during O&M activities. However, SDG&E would follow standard fire prevention practices and conduct a majority of the O&M activities along paved, existing roads where the risk of igniting vegetation is generally low. As previously described, SDG&E would also implement its existing Operations and Maintenance Wildland Fire Prevention Plan during O&M activities. Based on the implementation of the practices and plans described in this section, O&M of the Proposed Project would result in a less-than-significant impact to the risk of loss, injury, or death involving wildland fires.

3.10.4 References

CalEPA. 2025a. Hazardous Materials Business Plan. Online. https://calepa.ca.gov/hazardous-materials-business-plan-program/. Site visited April 2025.

CalEPA. 2025b. Cortese List: Section 65962.5(a). Online. https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/. Site visited April 2025.

California Building Standards Commission. 2022. 2022 California Fire Code, Title 24, Part 9. Online. https://codes.iccsafe.org/content/CAFC2022P1. Site visited June 2025.

California Department of Education. 2025. Geo Hub. Online. https://data-cdegis.opendata.arcgis.com/. Site visited May 2025.

CAL FIRE. 2025. Fire Hazard Severity Zones in State Responsibility Area. Online. https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Site visited April 2025

Cal OES. 2019. History and Organization. Online. https://www.caloes.ca.gov/wp-content/uploads/Fire-Rescue/Documents/CalOES_-_Fire_and_Rescue_-_History_and_Organization-2.pdf. Site visited May 2025.

Cal OES. 2021. CA Oil Pipelines. Online. https://services.arcgis.com/BLN4oKB0N1YSgvY8/arcgis/rest/services/CA_Oil_Pipeline_2018/FeatureServer. Site visited May 2025.

Cal OES. 2023a. State Mitigation Planning. Online. https://www.caloes.ca.gov/office-of-the-director/operations/recovery-directorate/hazard-mitigation/state-mitigation-planning/. Site visited May 2025.

Cal OES. 2023b. The history of Cal OES. Online. https://www.caloes.ca.gov/cal-oes/history/. Site visited May 2025.

Cal OES. 2023c. Hazardous Materials. Online. https://www.caloes.ca.gov/office-of-the-director/operations/response-operations/fire-rescue/hazardous-materials/#:~:text=The%20Hazardous%20Materials%20Division%2C%20under,hazardous%20materials%20incidents%20and%20threats. Site visited May 2025.

Caltrans. 2025. Local Bridges. Online. https://caltrans-gis.dot.ca.gov/arcgis/rest/services/CHhighway/Local_Bridges/FeatureServer/0. Site visited May 2025.

CFR. 2025a. Subpart C – Characteristics of Hazardous Waste. Online. https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-261/subpart-C. Site visited April 2025.

CFR. 2025b. Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace. Online. https://www.ecfr.gov/current/title-14/chapter-I/subchapter-E/part-77. Site visited April 2025.

CFR. 2025c. Part 133 – Rotorcraft External-Load Operations. Online. https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-133. Site visited April 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

County of San Diego. 2006. Alpine Evacuation and Protection Plan. Online. https://www.sandiegocounty.gov/oes/docs/CPEP_Alpine.pdf. Site visited November 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Site visited April 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 2025.

County of San Diego. 2022. San Diego County Emergency Operations Plan. Online. https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_oparea.html. Site visited May 2025.

County of San Diego. 2023. Multi-Jurisdictional Hazard Mitigation Plan. Online. https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_mitplan.html#:~:text=The%20Multi%2DJurisdictional%20Hazard%20Mitigation,natural%20and%20human%2Dcaused%20disasters. Site visited April 2025.

County of San Diego Department of Environmental Health and Quality. 2025. Certified Unified Program Agency (CUPA). Online.

https://www.sandiegocounty.gov/content/sdc/deh/hazmat/hmd_cupa.html. Site visited April 2025.

County of San Diego Airport Land Use Commission. 2010. Gillespie Field Airport Land Use Compatibility Plan. Online. https://www.san.org/Airport-Projects/Land-Use-Compatibility/ALUC-Resources. Site visited April 2025.

CPUC. 2021. Fire-Threat Maps and Fire-Safety Rulemaking. Online. https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking. Site visited April 2025.

CPUC. 2024a. General Order No. 128. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M558/K715/558715219.pdf. Site visited April 2025.

CPUC. 2024b. General Order No. 95. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M550/K438/550438485.pdf. Site visited April 2025.

DTSC. 2025. Hazardous Waste and Substances Site List (Cortese). Online. https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,FUDS&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+%28CORTESE%29. Site visited April 2025.

Federal Railroad Administration. 2020. USA Railroads. Online. https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/USA_Railroads_1/FeatureServer/0. Site visited May 2025.

EDR. 2026. Sycamore Canyon 230 Kilovolt Loop In to Suncrest Project EDR Area/Corridor Report.

FEMA. 2023. Regulations and Guidance. Online. https://www.fema.gov/emergency-managers/risk-management/hazard-mitigation-planning/regulations-guidance. Site visited May 2025.

Findlaw. 2023a. Government Code – GOV § 65962.5. Online. https://codes.findlaw.com/ca/government-code/gov-sect-65962-5/. Site visited April 2025.

Findlaw. 2023b. Public Resources Code – PRC § 4201. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-4201/. Site visited May 2025.

Findlaw. 2023c. Public Resources Code – PRC § 4202. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-4202/. Site visited May 2025.

Findlaw. 2023d. Public Resources Code – PRC § 4203. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-4203/. Site visited May 2025.

Findlaw. 2023e. Public Resources Code – PRC § 4204. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-4203/. Site visited May 2025.

ICC Digital Codes. 2019. 2019 California Fire Code, Title 24, Part 9. Online. https://codes.iccsafe.org/content/CFC2019P1/chapter-1-scope-and-administration. Site visited April 2025.

Marine Corps. 2020. Air Installations Compatible Use Zones Study 2020 Update. 2025. Online. https://www.miramar.marines.mil/Portals/164/2020%20MCAS_Miramar_AICUZ_final%20version%201.pdf. Site visited May 2025.

San Diego County. 2010. Montgomery Field Airport Land Use Compatibility Plan. Online. https://www.san.org/wp-content/uploads/2025/08/Montgomery-ALUCP-Dec-20-2010_Amended.pdf. Site visited November 2025.

State of California. 2022. Assembly Bill 2327 Carpenter-Presley-Tanner Hazardous Substance Account Act. Online. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2327. Site visited May 2025.

State of California. 2023. Health and Safety Code. Online. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=20.&title=&part=&chapter=6.5.&article=6.6. Site visited May 2025.

State of California. 2025. Cleanup Sites. Online. https://oehha.ca.gov/calenviroscreen/indicator/cleanup-sites. Site visited July 2025.

SWRCB. 2023a. Land Disposal Program. Online. https://www.waterboards.ca.gov/water_issues/programs/land_disposal/treated_wood_waste.html#:~:text=*%20Class%20I%20or%20I/II,updated%2003/29/2023. Site visited April 2025.

SWRCB. 2023b. IR Site 10 – Sycamore Canyon Atlas Missile Test Facility and EOD Access Road. Online. https://geotracker.waterboards.ca.gov/profile_report?global_id=DOD100299800. Site visited July 2025.

SWRCB. 2025. Regional Water Boards Map. Online. https://www.waterboards.ca.gov/tribal_affairs/images/regional_wb_map.png. Site visited April 2025.

U.S. Department of Labor. 2004. OSHA Act of 1970. Online. https://www.osha.gov/laws-regs/oshact/completeoshact/. Site visited April 2025.

U.S. DOT. 2021. Federal Hazmat Law. Online. https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-09/Hazmat%20Law%20Overview_September-2021_0.pdf. Site visited April 2025.

U.S. DOT. 2025. National Pipeline Mapping System Public Viewer. Online. https://pvnpms.phmsa.dot.gov/PublicViewer/. Site visited May 2025.

U.S. EPA. 2024a. Defining Hazardous Waste: Listed, Characteristic and Mixed Radiological Wastes. Online. https://www.epa.gov/hw/defining-hazardous-waste-listed-characteristic-and-mixed-radiological-wastes. Site visited April 2025.

U.S. EPA. 2024b. Superfund: CERCLA Overview. Online. https://www.epa.gov/superfund/superfund-cercla-overview. Site visited April 2025.

U.S. EPA. 2024c. The Superfund Amendments and Reauthorization Act (SARA). Online. https://www.epa.gov/superfund/superfund-amendments-and-reauthorization-act-sara. Site visited April 2025.

U.S. EPA. 2024d. Summary of the Toxic Substances Control Act. Online. https://www.epa.gov/laws-regulations/summary-toxic-substances-control-act. Site visited April 2025.

U.S. EPA. 2024e. Overview of the Clean Air Act and Air Pollution. Online. https://www.epa.gov/clean-air-act-overview. Site visited April 2025.

U.S. EPA. 2024f. Summary of the Clean Water Act. Online. https://www.epa.gov/laws-regulations/summary-clean-water-act. Site visited April 2025.

U.S. EPA. 2024g. Summary of the Resource Conservation and Recovery Act. Online. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act. Site visited April 2025.

Westlaw. 2024. Barclays Official Title 27 Cal. Code Regs. Section 15100. Online. https://govt.westlaw.com/calregs/Document/I875ABC80E6AF11EEB569BD30B8CDDCCB?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default). Site visited April 2025.

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ATTACHMENT 3.10-A: CORRIDOR STUDY

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Attachment 3.10-A: Corridor Study is included in the Administrative Draft Environmental Impact Report Volume 2.

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ATTACHMENT 3.10-B: WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES

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BEST MANAGEMENT PRACTICES

MANUAL FOR WATER QUALITY CONSTRUCTION

January 2024

Geosyntec consultants

The purpose of this Water Quality Construction Best Management Plan Manual (BMP Manual) is to provide standardized utility construction project oriented BMPs designed to reduce or eliminate potential pollutants in runoff in support of water quality protection. This BMP Manual includes updates to address additional requirements of the new 2022 California Construction General Storm Water Discharge Permit (CGP) (California State Water Resources Control Board (SWRCB) Order No. 2022-057-DWQ), which became effective on September 1, 2023, as well as to update information related to San Diego Gas and Electric (SDG&E) and Southern California Gas (SoCalGas) operations and maintenance activities.

This BMP Manual applies to utility construction projects and maintenance activities which disturb soil and is intended as a reference manual for contractors performing such work as part of their contractual obligations to maintain compliance with SDG&E and SoCalGas stormwater management objectives. In conjunction with the regulations and requirements of the various jurisdictions, municipalities, and regulatory authorities overseeing SDG&E and SoCalGas utility construction projects and activities, this BMP Manual has been developed to provide a consistent approach to water quality management. It is intended to be applied by SDG&E/SoCalGas and their contractors throughout their service areas while meeting the practical needs of specific utility work.

The BMPs presented in this Manual have been designed to utilize the best and most practical stormwater pollution prevention features from multiple resources including: the California State Water Resources Control Board (SWRCB), the California Stormwater Quality Association (CASQA), and California Department of Transportation (Caltrans) BMP Manuals, which have all been modified to integrate into utility construction activities compliant with the applicable requirements, regulations, and ordinances.

The BMPs are broken into the following categories:

1. Sediment Controls
2. Waste and Material Management Controls
3. Non-Stormwater Discharge Controls
4. Erosion Control and Soil Stabilization

With each BMP, specific information; including applicability, design, limitations, installation, and maintenance, are provided. Specific figures, images, and diagrams are provided for the BMPs as reference. Photographs provided in this BMP Manual have been obtained and granted permission for use by Geosyntec Consultants Inc., California Department of Transportation (Caltrans), CASQA, SDG&E and SoCalGas.

During BMP selection, the users of this BMP Manual should consider the benefits and limitations of each of the BMPs considered in the context of the site conditions. BMP success is contingent not only on appropriate selection and implementation, but also on the coordination and communication between project management, environmental, and construction teams.

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BMP 1-01 SCHEDULING

DESCRIPTION

Scheduling consists of the planning of soil disturbance activities to avoid periods of precipitation whenever practical. It is a cost-effective way to control erosion during construction.

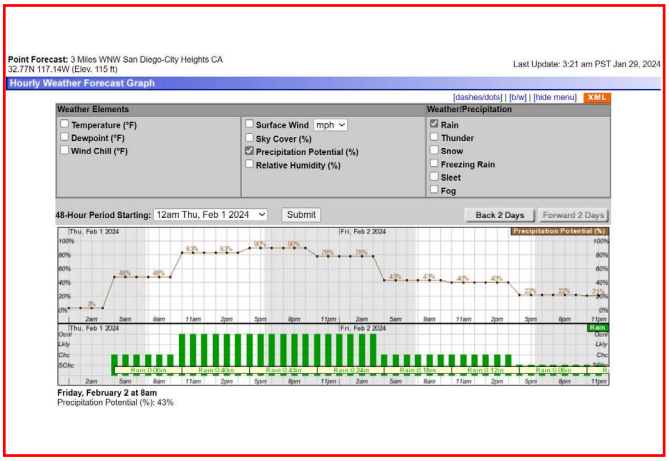
APPLICABILITY

Applicable on all construction and "construction-like" operations, projects, and maintenance sites when soil disturbing activities take place. It is particularly important for projects with large areas of soil disturbance.

DESIGN

Use the following measures as applicable:

- Consider scheduling major soil disturbing activities or activities near environmentally sensitive areas (e.g., adjacent to water bodies) during prolonged periods when no precipitation is forecast or during the dry season.
- Monitor the weather forecast for seasonable and unseasonable precipitation events. Obtain weather information from the National Oceanic and Atmospheric Administration National Weather Service at www.weather.gov.
- Maintain digital copies of forecasts and document decisions related to inspections and BMP implementation for projects subject to the CGP.



- Appropriate sediment and erosion control BMPs are required year-round. Always be prepared to deploy additional erosion and sediment control and soil stabilization BMPs as needed throughout the duration of the project. Offsite sediment discharges can occur as a result of unseasonable precipitation, vehicle tracking, unanticipated wind, and non-storm water discharges.
- Sequence work to minimize soil-disturbing activities during forecasted precipitation events.
- Limit disturbed soil area to the amount of acreage that can be reasonably protected prior to a forecasted precipitation event.
- Stabilize disturbed soil areas as soon as practical, and prior to a forecasted precipitation event.
- Protect environmentally sensitive areas, such as drainage channels, streams, and natural watercourses.

BMP 1-01 SCHEDULING

LIMITATIONS

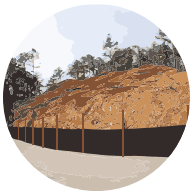
Environmental constraints such as nesting bird season and weather limitations may impact usability.

MAINTENANCE

- Review applicable scheduling and sequencing of construction activities throughout the project or activity to minimize the total area of exposed soil and the exposed soil exposure time.
- When a precipitation event is forecast, adjust the construction schedule to implement soil stabilization and sediment control BMPs on all disturbed areas prior to the onset of precipitation.
- Inspect erosion and sediment control BMPs prior to and after each storm event, and routinely throughout the construction and/or clean-up activity. If inspections warrant construction BMP changes, amend the schedule accordingly.

EFFECTIVENESS

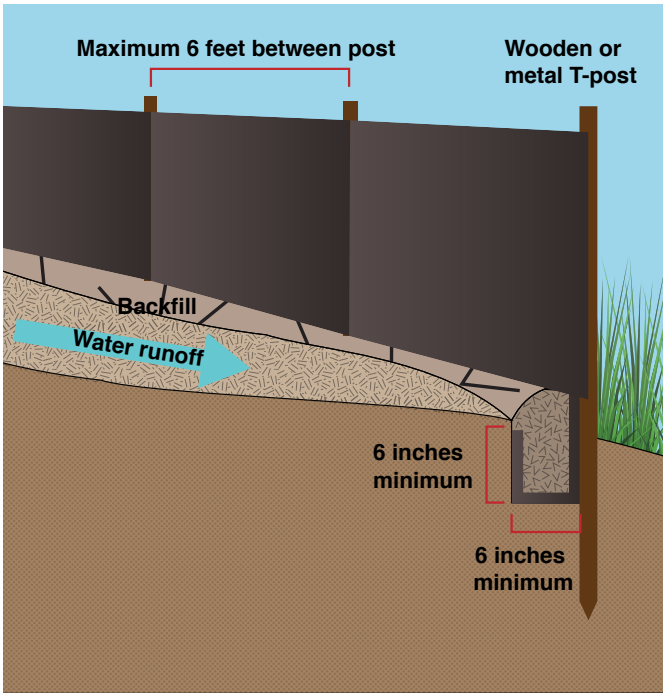
Scheduling effectively reduces erosion and sedimentation because it requires BMP installation where necessary and appropriate. Effectiveness is controlled by continuing updated schedules based on variable site conditions.



BMP 1-02 SILT FENCE

DESCRIPTION

Silt fences are temporary linear sediment control barriers manufactured of a woven geotextile that are designed to allow water to permeate while retaining course sediment through sedimentation. Silt fences act by intercepting and slowing the flow of sediment-laden runoff and allowing sediment to settle from the runoff before water leaves the construction site boundaries.



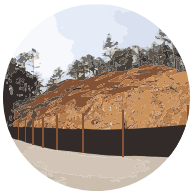
APPLICABILITY

Silt fences can be used in the following applications:

- Perimeter controls;
- Below the toe or down slope of disturbed slopes or cleared areas;
- Along streams or channel embankments;
- Around temporary spoils areas and stockpiles; or
- Around inlets within disturbed areas.

DESIGN

- Identify silt fence installations with a setback of at least 3 feet from the toe of a slope in areas suitable for temporary ponding or deposition of sediment. Where a 3-foot setback is not practical, construct as far from the toe of the slope as practical.
- Develop the length of each reach (length of fence) so that the change in base



BMP 1-02 SILT FENCE

elevation along the reach does not exceed one-third of the barrier height; each reach should not exceed 500 feet maximum, with the ends turned upslope in a J-hook fashion.

- The maximum length of slope draining to the silt fence should be 100 feet or less.
- For areas with moderate sediment loads, standard silt fence may be used. For areas affected by high winds and or heavier sediment loads, heavy duty silt fence (wire backed) is advised.
- J-hook installation can be utilized for breaking up sedimentation areas to a smaller surface and reduce ponding across larger disturbed slopes.

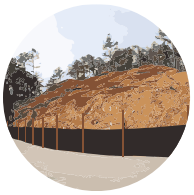
LIMITATIONS

- Silt fences shall not be used to divert water.
- Silt fences shall not be considered for installation below or on slopes steeper than a 1:1 gradient or for soils which contain high numbers of rocks or loose dirt clods unless the rocks are removed and additional controls are used upslope (i.e. rockfall netting).
- Silt fences cannot be used in areas of concentrated flow.
- Ineffective unless trenched and keyed in according to installation guidelines.
- Silt fence should not be used on slopes prone to landslides or significant erosion.

INSTALLATION

Install all silt fence on level contours.

- Excavate a trench approximately 6 inches wide and 6 inches deep to place the bottom of the silt fence into, ensuring that is not wider or deeper than necessary.
- Key-in or bury the bottom of silt fence fabric in the trench and tamp down soil into place. If it is not feasible to trench along the slope contour, use sandbags or backfilling to key in the bottom of the fabric.
- Install fence posts at least 12 inches below grade on the down slope side of trench. These posts can be metal or wooden. If wooden these stakes shall be structurally sound. If metal, top of stake shall be protected with caps.



BMP 1-02 SILT FENCE

- Trench should be backfilled with native material and compacted or secured with gravel bags if compaction is not feasible.
- When joining separate rolls of silt fence, adjoining seams should be spliced together at a support post with a minimum of 6-inch overlap with both ends secured. Wire used to secure the tops of stakes together should be at least 9-gauge or heavier.
- If staples are used to join fabric to support posts, they should be a minimum of 1.75 inches long and made of 15-gauge or heavier wire.
- If possible, an undisturbed or stabilized area should be left immediately down slope from the fence.

OTHER INSTALLATION TYPES

Wire Backed

- Wire side should be facing the downward side of the slope.
- Installation using metal t-posts with safety caps as stakes is recommended.
- Cannot be installed using static slicing.

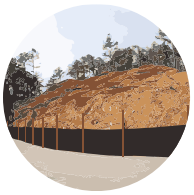
J-Hook Installation

J-Hooking describes silt fence installation that has multiple upturned ends to breakup long runs of fence and provide multiple storage areas as retention areas.

Installation should be secured with gravel bags at ends.

MAINTENANCE

- Perform routine inspections on silt fence weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Repair or replace split, torn, slumping, undercut or weathered material. Note that the geotextile may need to be replaced when installation is needed for longer than 5 to 8 months due to degradation and limited durability.



BMP 1-02 SILT FENCE

- Remove accumulated sediment when it reaches one third of the barrier height. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state, and local requirements.

Removal

- Silt fence should be left in place until the upgradient area is stabilized or in the process of stabilization (i.e., hydroseeding).
- Following the removal of the BMP, fill and compact post holes, anchor trench, remove sediment accumulation, return to original line and grade, and stabilize disturbed areas.

BMP 1-03 FIBER ROLLS

DESCRIPTION

A fiber roll (straw wattle) consists of straw, or biodegradable materials that are bound into a tight roll wrapped by a natural fiber or plastic netting. They are used to intercept runoff from construction sites by releasing runoff as sheet flow and providing deposition of sediment from the runoff through sedimentation. They are also used to interrupt the length of a slope to reduce erosion until vegetation can be established for permanent applications. Biodegradable fiber rolls are preferred in areas where wildlife entrapment or trash accumulation is a concern.

APPLICABILITY

- For use at top, face, toe, and as grade breaks of exposed and erodible slopes to shorten slope lengths.
- At the end of downward slope as it transitions into a steeper slope.
- Project Perimeter
- Around stormdrains as a form of inlet protection.
- Downslope of disturbed exposed soils.
- As a berm around temporary spoils and stockpiles.

DESIGN

Fiber rolls should be installed on level contours with the following slope grade breaks for Risk Level 2 and 3 projects under the CGP.

Slope	Maximum Interval
4:1	20 ft
4:1 to 2:1	15 ft
2:1 or greater	>10ft

LIMITATIONS

- Fiber rolls are not effective unless trenched with direct contact with soil.
- If fiber rolls are not properly staked at 4-foot intervals on center, and entrenched, stormwater flows can dislodge transport them.
- Frequent maintenance may be needed,

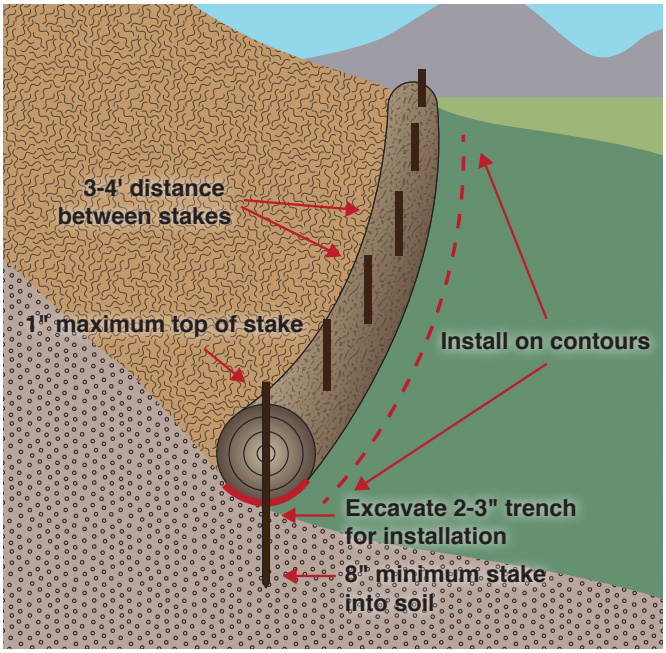
BMP 1-03 FIBER ROLLS

especially on steep slopes and sandy soils, in order to remain effectiveness.

- Fiber rolls should not be used on slopes prone to landslides or significant erosion.
- Fiber rolls may need to be replaced 12-24 months after installation depending on integrity.

INSTALLATION

- Prepare soil ahead of installation by digging small trenches across slopes on contour. Trench depth should be 1/4 to 1/3 (2" to 3") of the thickness of the roll, and the width should equal the roll diameter.
- Installation trench should be parallel to the slope contour.
- Fiber rolls should be installed starting from toe of the slope upwards towards the top.
- Ends of fiber roll should be turned upslope in the form of a J-Hook at the end of each run.
- Stake fiber rolls into the trench.
- Recommend placing pilot holes in wattle and soil prior to staking.
- Drive wooden stakes at the end of each fiber roll and space at a 4-foot maximum on center along each fiber roll.
- If more than one fiber roll is placed in a row the fiber rolls should be overlapped by no less than one foot, staked together, and not abutted at the ends.



MAINTENANCE

- Perform routine inspections on fiber rolls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Repair or replace spilt, torn, unraveling, or slumping fiber rolls.
- Do not use fiber rolls containing PAM or other flocculants without prior environmental approval. Use may be considered passive and/or active treatment and is subject to additional requirements of the CGP.

BMP 1-03 FIBER ROLLS

REMOVAL

When used in a permanent application, biodegradable fiber rolls can be left in place, these fiber rolls must contain biodegradable netting, (i.e., no plastic wrapped netting). Removal can result in greater soil disturbance.

Remove fiber rolls only when up gradient exposed soil areas are stabilized and/or pollutant sources are no longer a hazard.

BMP 1-04 GRAVEL BAG BERMS

DESCRIPTION

A gravel bag berm is a series of clean gravel filled bags placed on level contours and stacked in an overlap pattern to intercept runoff.

APPLICABILITY

For sediment control:

- Below toe of slope, erodible slopes, and other cleared areas.
- As sediment traps for culvert protection.
- Site perimeter controls.
- Stockpile perimeter controls.
- Parallel to roadways to prevent sedimentation onto and from roadways.
- Along channels and ditches.
- At the face and grade breaks of exposed slopes.
- At top of slopes to divert runoff from disturbed soils.
- As chevrons across minimally sloped roadways.

DESIGN

- Gravel bag berms should be installed on level contours and butted together with overlaps.
- When used on slopes, the following sheet flow lengths apply, with the first row near the toe of slope:

Slope	Maximum Interval
4:1	20 ft
4:1 to2:1	15 ft
2:1 or greater	>10ft

- The ends of the berms should be turned up slope to prevent runoff going around the berm.
- Areas should be clear up slope from the berm to allow for sedimentation and sufficient ponding area.
- When installed near the top of slope, berms should be set back from top of slope when feasible. For areas with no room for set-back, additional bags can be placed perpendicular to a berm to serve as a cross barrier.
- For installations with multiple layers, abutment joints should overlap and a pyramid approach should be utilized for berms 3 rows or higher.
- Should be utilized with other BMPs to maximize sediment containment.

BMP 1-04 GRAVEL BAG BERMS

LIMITATIONS

Gravel bag berms can be difficult to remove, limiting their usefulness in landscaped areas. They are not appropriate for drainage areas larger than 5 acres. Gravel bags are also prone to degradation by sunlight and are easily damaged by construction equipment and vehicles in and near roadways.

MAINTENANCE

- Perform routine inspections on gravel bag berms weekly, prior to forecasted rain events, daily during extended rain events, and, after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Resecure or replace gravel bags as identified.
- Repair washouts or other damage.
- Bags may need to be replaced when installation is required for more than two to three months due to solar degradation.
- Inspect gravel bag berms for sediment accumulation and remove sediment when accumulation reaches one-third of the berm height. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.

- Remove gravel bag berms when no longer needed and when feasible, recycle gravel fill. Remove sediment accumulation, and clean, re-grade, and stabilize disturbed areas.

BMP 1-05 SAND BAG BARRIER

DESCRIPTION

A sand bag barrier is a temporary linear sediment barrier consisting of at least one row high of sand bags placed end-to-end, designed to intercept and slow sediment laden storm water and non-storm water runoff. Sand bag barriers allow sediment to settle from runoff before water leaves the construction site. They are intended to block and pond storm-water flows.

APPLICABILITY

- To detain non-stormwater flows
- To temporarily close or continue broken, damaged, or incomplete curbs
- During construction activities in streambeds when the contributing drainage area is small.

DESIGN

- Sand bag barriers should be installed on level contours and butted together with overlaps.
- When used on slopes, the following sheet flow lengths apply, with the first row near the toe of slope:

Slope	Maximum Interval
4:1	20 ft
4:1 to2:1	15 ft
2:1 or greater	>10 ft

- The ends of the berms should be turned up slope to prevent runoff going around the berm.
- Areas should be clear up slope from the berm to allow for sedimentation and sufficient ponding area.
- When installed near the top of slope, berms should be set back from top of slope when feasible. For areas with no room for set-back, additional bags can be placed perpendicular to a berm to serve as a cross barrier.
- For installations with multiple layers, abutment joints should overlap and a pyramid approach should be utilized for berms 3 rows or higher.
- Should be utilized with other BMPs to maximize sediment containment.

BMP 1-05 SAND BAG BARRIER

LIMITATIONS

- Should not be utilized in traffic areas or other areas where potential flooding is possible.

MAINTENANCE

- Perform routine inspections on sand bag barriers weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Resecure or replace sand bags as identified.
- Repair washouts or other damage.
- Bags may need to be replaced when installation is required for more than two to three months due to solar degradation.
- Inspect sand bag barriers for sediment accumulation and remove sediment when accumulation reaches one-third of the berm height. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.

BMP 1-06 STORM DRAIN INLET PROTECTION

DESCRIPTION

A BMP or a combination of BMPs used at storm drains or other drainage inlets to protect against the discharge of sediment-laden storm water and non-storm water runoff from construction or operational and maintenance activities. The BMP slows or ponds the storm water flow, giving the sediment time to settle out before discharge to the storm drain.

APPLICABILITY

For use at all downstream storm drain and/or drainage inlets that have the potential to be impacted by construction activities, site stormwater run-off, or non-stormwater discharges.

DESIGN

1. Identify all downstream storm drain inlets or drainages that have the potential to receive runoff or non-stormwater discharges from construction activities.
2. Drainage areas to each control should not exceed 1 acre.
3. Area should be provided for around the inlet to allow ponding without flooding.

Installation Types

Silt Fence

For use in internal areas with less than 5% slope and for sheet flows.

Not for use within active roadways.

Gravel Bag and Filter Media

For use on sloped and paved streets and for sheet flow

Proprietary Temporary Geotextile Insert

Various products provide different features, including different pollutant reduction and sizing. Refer to manufacturer specifications for design and installation requirments.

Most inserts fit beneath the grate of a drop box inlet or outside a curb inlet and are fastened to the grate or curb.

LIMITATIONS

Should not be utilized in areas where runoff will result in ponding and/or flooding into road traffic or onto erodible surfaces or slopes, or overflow unto sidewalks.

BMP 1-06 STORM DRAIN INLET PROTECTION

Should not be used in high flow conditions as a singular BMP. Adjunct additional project BMPs, such as sediment traps should be used in conjunction.

Frequent maintenance is required.

INSTALLATION

Installation Types

Silt Fence

Do not place fabric beneath inlet grate. Refer to BMP 1-04 for silt fence specifications.

1. Excavate a trench approximately 6 inch wide by 6 inch deep along the perimeter of the inlet.
2. Secure silt fence with wood stakes a maximum of 3 feet apart, driving at least 18 inches into the ground or 12 inches below the bottom of the trench.
3. Lay fabric along the trench and up the stakes. Maximum silt fence height is 24 inches.
4. Staple the filter fabric to wooden takes using heavy-wire duty staples at least 1 inch in length.
5. Backfill with gravel or compacted earth around perimeter.

Gravel Bag and Filter Media

1. Construct around a storm drain inlet on paved streets.
2. Leave room upstream of barrier to allow accumulated water to pond and sediment to settle.
3. Place filter fabric followed by several layers of gravel bags, overlap the bags and pack tightly together.

Proprietary Temporary Geotextile Insert

Refer to manufacturer instruction for installation.

- Spaces and grates should be sealed to prevent seepage of sediment-laden water.
- Most municipalities require removal of BMPs from storm drain inlets within their right of way within 72 hours of a rain event (e.g., certain municipalities require removal of inlet protection prior to forecast precipitation events)
- Remove inlet protection at the end of the construction period or when the inlet is no longer impacted by construction activity.

BMP 1-06 STORM DRAIN INLET PROTECTION

MAINTENANCE

- Perform routine inspections on storm drain inlet protection weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Repair any holes or gashes in bags, silt fence, or filter fabric as appropriate. Replace any broken gravel bags, if used.
- Inspect barriers for sediment accumulation and remove sediment when accumulation reaches one-third of the barrier height. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state, and local requirements.

BMP 1-07 TRACKING CONTROLS

DESCRIPTION

Tracking controls consist of constructed steel and/or manufactured hardened plastic plates (rumble plates) in combination with gravel. Tracking controls reduce offsite tracking of sediment and other pollutants by providing a stabilized entrance at defined soil disturbance activity site entrances and exits with materials that aid in removing sediment from vehicles, specifically tires or tracks. Tracking controls can also consist of practicing methods to clean-up and remove sediment or other materials preventing them from entering a storm drain, such as sweeping and/or vacuuming. Tracking controls can also include tire washing.

APPLICABILITY

Use stabilized entrances and/or sweeping at construction sites:

- Where soils or materials can be tracked onto public roads;
- Adjacent to water bodies.

Tire washing should be only utilized when the above methods are not adequately controlling trackout.

IMPLEMENTATION

Construction site entrance/exists should be graded to prevent runoff from leaving the construction site.

Stabilized Entrances

- Design stabilized entrance/exit to support the heaviest expected vehicles and equipment.

Limit the points of entrance/exit to the construction or operations and maintenance site by designating combination or single purpose entrances and exits. Require all employees, subcontractors, and others to utilize tracking controls when existing construction sites. Limit speed of vehicles to control dust.

Street Sweeping and Vacuuming

Visible sediment tracking should be swept and/or vacuumed daily and as needed during rain events. Manual sweeping is appropriate for smaller projects. Larger projects should utilize mechanical sweepers.

Mechanical sweepers shall be rated PM-10.

If not mixed with debris or trash, removed sediment can be incorporated back into the project as backfill.

BMP 1-07 TRACKING CONTROLS

Tire Washing

- Wash racks should be sized to support the heaviest expected traffic loads to the jobsite.
- Provide a turnout or doublewide exit to avoid traffic from entering through the tire washing area.
- Design a drainage ditch to route all rinse or wash waters from the tire washing area to a sediment trapping device (see BMP 1-10) to prevent any wash runoff from leaving the site.
- Hoses should be equipped with automatic shutoff nozzles.

LIMITATIONS

- Sweeping and vacuuming may not be effective when sediment is wet or when tracked soil is caked onto road surfaces, additional scraping may be needed to adequately remove sediment.
- Sweeping is less effective for clay-like soils.

MAINTENANCE

Perform routine inspections on tracking controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

Stabilized Entrances

- Inspect routinely for damage and assess effectiveness. Remove sediment and repair if the stabilized entrance/exit is clogged with sediment.
- Where tracking has occurred on roadways, sweeping should be conducted the same day. Water should not be used to wash sediment off the streets, unless necessary and approved by environmental manager lead. If spray water is used, it must be captured to prevent sediment-laden water from running off the street into storm drains.
- Keep all temporary roadway ditches clear.

Street Sweeping and Vacuuming

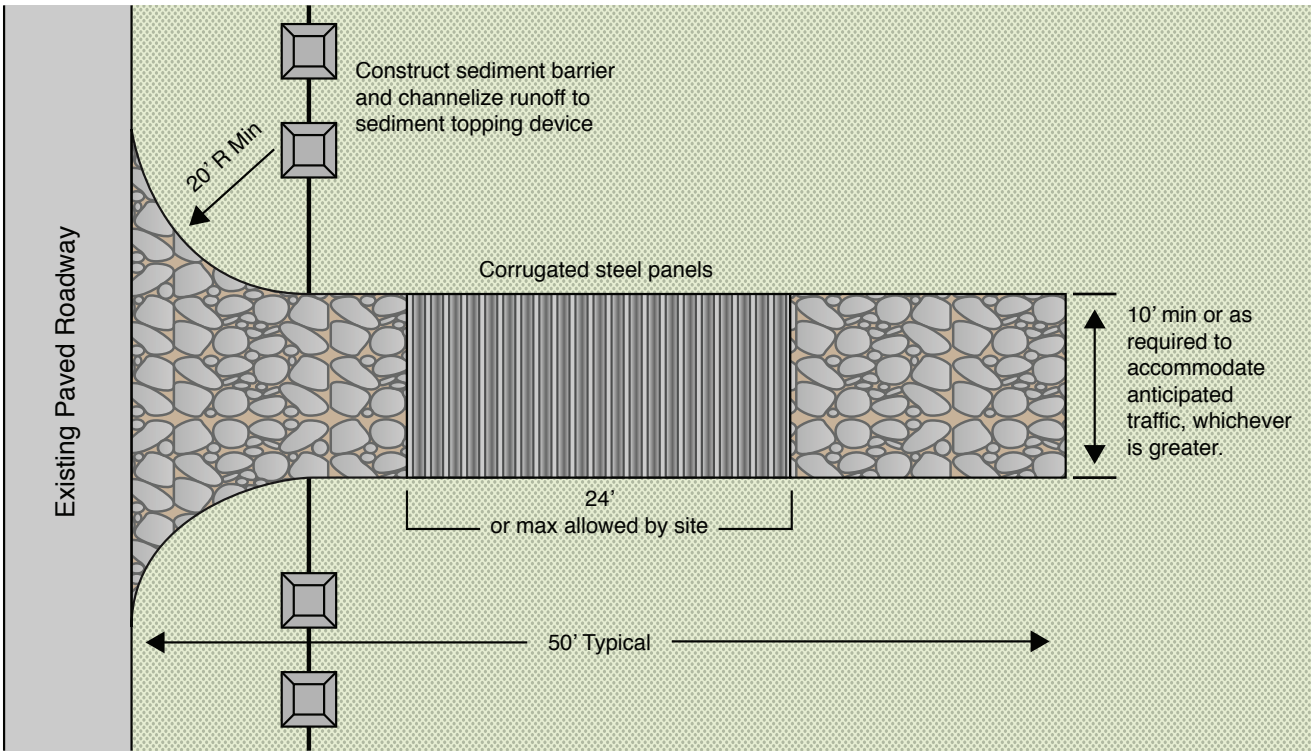
Inspect all site paved access roads daily and remove any sediment or other materials on the roads by vacuuming or sweeping daily.

BMP 1-07 TRACKING CONTROLS

- Be careful not to sweep up any unknown substance or any object that may be potentially hazardous.
- After sweeping is finished, properly dispose of sweeper wastes.

Tire Washing

- Inspect rack and/or sediment trap system routinely for damage and assess effectiveness.
- Remove accumulated sediment to maintain system performance.



BMP 1-08 STOCKPILE MANAGEMENT

DESCRIPTION

Stockpile management consists of placing temporary BMPs, such as secured covers, over the piles, and/or placing berms, silt fences, fiber rolls, sand/gravel bags around the perimeter of stockpiles. Soil stabilizers/ binders may also be used to augment stockpile management (BMP 4-05).

APPLICABILITY

For use on construction projects that require stockpiled soil, waste materials, and/or paving materials.

Construction and waste material stockpiles require protection from rain and wind at all times unless actively being used (protect during non-activity) and at the end of each work day.

LIMITATIONS

- Limit use of plastic covers, which can quickly break down into microplastics as well as increasing the runoff volume from lack of infiltration.
- Plastic covers should not be utilized adjacent or within substations due to arc flash potential.

IMPLEMENTATION

- Locate stockpiles away from natural buffers and stormwater conveyances.
- All stockpiles need to be bermed with temporary perimeter barriers such as fiber rolls, gravel bags, compost berms, or silt fences.

- All stockpiles should be covered and bermed or otherwise stabilized prior to the onset of precipitation.
- Where possible, runoff should be directed away from stockpiles.
- Sufficient BMP materials for temporary stockpile management should be available onsite for rapid deployment.

MAINTENANCE

- Perform routine inspections on stockpiles weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Repair and/or replace covers, and perimeter BMPs as needed.

BMP 1-09 SEDIMENT BASIN

DESCRIPTION

Sediment basins are temporary basins formed by excavation or by constructing an embankment to temporarily detain sediment-laden runoff, allowing sediment to settle out before water leaves the site. The CGP specifies that sediment basins be engineered and designed per the CASQA fact sheet SE-2, therefore, this BMP provides specific engineered guidance and the CASQA handbook reference.

APPLICABILITY

Sediment basins are appropriate:

- If sediment-laden water may enter a drainage system or watercourse.
- If areas are disturbed during the rainy season, in association with dikes, temporary channels, and pipes to convey runoff from disturbed areas.
- In conjunction with erosion controls.
- For larger projects greater than 5 acres.

DESIGN

Design the basin in accordance with CASQA BMP factsheet SE-2.

LIMITATIONS

- Sediment basins are large and not suitable for smaller sites.
- If used, they should be designed, developed, and constructed before land disturbance begins.
- Fencing should be installed around the basin to prevent unauthorized entry.

INSTALLATION

Refer to CASQA BMP factsheet SE-2.

MAINTENANCE

- Check inlet and outlet structures, spillway, and fencing for damage or obstructions. Repair damage and remove obstructions as needed.
- Remove accumulated sediment when it reaches one half of the basin height.
- Removed sediment shall be incorporated into the project appropriately or disposed of in accordance with federal, state, and local requirements.

BMP 1-09 SEDIMENT BASIN

- Remove accumulation of any vegetation during every inspection.
- Remove standing water from the basin within 72 hours after accumulation to prevent the production of mosquitoes.
- Completely remove basin when no longer needed. Remove sediment accumulation. Fill and compact excavation, any fencing post-holes and anchor trench, and blend the surface with the adjacent ground.

BMP 1-10 SEDIMENT TRAP

DESCRIPTION

Sediment traps are small, temporary containment areas where sediment-laden runoff is detained, allowing sediment to settle from the runoff before water leaves the site. Sediment traps are formed by excavating or constructing an earthen embankment across a waterway or low drainage area, and usually have a gravel outlet.

APPLICABILITY

Sediment traps are appropriate:

- If the drainage area is less than 5 acres.
- If sediment-laden water may enter a drainage system or waterway.
- For short term construction projects and smaller drainage areas.
- In conjunction with additional erosion controls.

DESIGN

- Should be constructed prior to other land disturbance, when feasible.
- Allow for sufficient space to allow for infiltration and sediment settling.

Placement

- Outside the area being graded, but as near as practical to sediment producing areas, with access for maintenance.
- Ideally in natural depressions or in small swales to minimize disturbance.
- At the perimeter of a site, at one or more locations where sediment-laden runoff is discharged offsite, or to a storm drain / watercourse.
- Around or upslope from storm drain inlet protection measures.
- Within property limits and where failure will not result in loss of life, building damage, or interruption of public roads or utilities.
- Should not be located in streams unless properly permitted with regulatory agencies. Consult with Project Environmental Lead prior to placement.

Sediment traps should be designed per referenced engineering standards or a local grading ordinance.

BMP 1-10 SEDIMENT TRAP

- Trap side slopes should be 3:1 or flatter.
- The outlet pipe or open spillway must be designed to convey anticipated peak flows.

LIMITATIONS

- Requires a large surface area for infiltration and settling of sediment.
- Only removes large and medium sized soil particles and requires additional erosion controls upstream.
- Can cause vector issues (i.e., mosquitos) from accumulated standing water.
- Fencing should be provided around the trap to prevent unauthorized entry.
- Cannot be located in live streams.
- Typical design lifespan is only six months to one year and is a temporary measure.

INSTALLATION

- Clear any vegetation under the embankment and pool area.
- The compacted embankment fill material must be free of roots, vegetation, oversize, or other objectionable material.
- Cut and fill slopes should be 3:1 or flatter.
- When a riser is used, all pipe joints must be watertight, and at least the top two-thirds of the riser should be perforated with half inch diameter holes spaced eight inches vertically and ten to twelve inches horizontally.
- Utilize rock, vegetation, or other erosion control measures to protect the trap outlets against erosion.
- When an earth or stone outlet is used, the outlet crest elevation should be at least one foot below the top of embankment.
- When a crushed stone outlet is used, the crushed stone or gravel should meet AASHTO M43, size No. 2 or 24, or its equivalent.

MAINTENANCE

- Perform routine inspections on sediment traps weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Sediment must be removed from the trap following each rainfall event and properly disposed of per local regulations.
- Inspect trap banks for seepage and structural soundness.
- Inspect outlet structures, spillway, and fencing for any erosion, damage, or obstructions. Repair damage and remove obstructions as needed.

BMP 1-10 SEDIMENT TRAP

- Remove accumulation of any vegetation in ponding area.
- Water suitable for mosquito production may stand in the sediment trap, particularly if subjected to daily non-storm water flows. Remove standing water from the trap within 72 hours after accumulation.
- Remove trap when no longer needed. Remove sediment accumulation, fill and compact excavation, any fencing post-holes, and blend the surface with adjacent ground.
- BMPs that require dewatering shall be continuously attended during dewatering. Dewatering BMPs shall be implemented at all times during such activities.

BMP 1-11 CHECK DAMS

DESCRIPTION

Check dams are small barriers constructed of rock, logs, gravel bags, sandbags, fiber rolls, or other suitable materials, placed along a curb and gutter or across a swale or drainage ditch. Check dams create small pools and reduce the effective slope of the channel, reducing scour and erosion by reducing flow velocity and increasing residence time within the channel. Check dams promote sediment trapping.

APPLICABILITY

If sedimentation should be promoted behind the dam.

If erosion protection is desired in small intermittent channels and temporary swales.

During the establishment of grass linings in drainage ditches or channels.

If grade control is desired or required.

DESIGN

For use in:

- In small open channels that drain 10 acres or less.
- In channels to reduce slope and storm water runoff velocities.
- In temporary ditches where the short length of service does not warrant establishment of erosion-resistant lining.

LIMITATIONS

Check dams should not be utilized in:

- In streams or in channels with flow between storm events.
- In channels that are already grass-lined, unless erosion potential or sediment-laden flow is expected. Installation of check dams may damage vegetation.

these materials.

Check dams reduce the capacity of the ditch or swale. Alternative BMPs or an increased swale or ditch size may be necessary, or the size of the ditch or swale may need to be increased to prevent overtopping.

Maximum slope and velocity reduction is achieved when the toe of the upstream dam is at the same elevation as the top of the downstream dam. The center section of the dam should be lower than the edge sections (at least 6 inches), acting as a spillway, so that the check dam will direct flows to the center of the ditch or swale.

BMP 1-11 CHECK DAMS

The check dam should be installed along a level contour and should completely span the ditch or swale to prevent washout.

Install the first check dam approximately 16 feet from the outfall device and at regular intervals based on slope gradient and type.

Check dams should be placed at a distance and height to allow small pools to form between each check dam.

For multiple check dam installation, backwater from a downstream check dam should reach the toe of the upstream check dam.

High flows (typically a 2-year storm or larger) should safely flow over the check dam without an increase in upstream flooding or damage to the check dam.

INSTALLATION

- Rock check dams are usually constructed of 8-to-12-inch rock placed individually by hand or mechanically, but never dumped. The rock used should be large enough to stay in place given the expected channel flow. Abutments should be extended 18 inches into the channel bank. Rock can be graded such that smaller diameter rock (2 to 4 inches) is located on the upstream side of larger rock, increasing residence time.
- Log check dams are usually constructed of 4-to-6-inch diameter logs installed vertically, and embedded at least 18 inches into the soil, and can be bolted or wired.
- See BMP 1-03 for installation of fiber roll check dams. Fiber rolls should be trenched in, backfilled, and firmly staked.
- Gravel bag and sandbag check dams are constructed by stacking bags across the ditch or swale. Gravel bags and sandbags used to construct check dams should conform to the requirements of BMP 1-04 and 1-05, respectively. Tightly abut bags and stack in a pyramid fashion no higher than 3 feet. Upper rows shall overlap joints in lower rows.
- Manufactured products used to construct check dams should be installed in accordance with the manufacturer's instructions, and typically requires trenching or anchoring.
- If grass is planted to stabilize the ditch or swale, the check dam should be removed when the grass has matured, unless the slope of the swale is greater than 4 percent.

BMP 1-11 CHECK DAMS

MAINTENANCE

- Perform routine inspections on check dams weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Replace missing, damaged, or degraded rock, bags, rolls, etc.
- If the check dam is used as a grade control structure, sediment removal is not required as long as the system continues to control the grade.
- Sediment can be re-suspended during subsequent storms or removal of the check dam. Remove accumulated sediment when it reaches 1/3 of the barrier height, and prior to permanent seeding or soil stabilization. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state, and local requirements.
- Water suitable for mosquito production may stand behind check dams, particularly if subjected to daily non-storm water flows. Remove standing water from the dam 72 hours after accumulation.

BMP 1-12 MANUFACTURED LINEAR SEDIMENT CONTROLS

DESCRIPTION

Manufactured Linear Sediment Controls (MLSC) are pre-manufactured devices that are typically used for perimeter sediment control or as check dams within channels. They are typically reusable.

APPLICABILITY

For use in areas as a reusable option instead of fiber rolls or silt fences.

DESIGN

Identify installations with a setback at least 3 feet from the toe of a slope in areas suitable for temporary ponding or deposition of sediment. Where a 3-foot setback is not practical, construct as far from the toe of slope as practical.

Different MLSCs are available for use on different substrates, including soil and hardscapes. Follow manufacturer specifications for use.

LIMITATIONS

As a proprietary product, limitations will vary. SWPPP Developers should review product specifications for proper applicability.

Should not be utilized for areas draining over 5 acres.

INSTALLATION

Install products on level contours.

When used on soil, MLSCs should be trenched or attached to the ground per manufacturers recommendations.

MLSCs designed for hardscape can be attached by various methodologies, including nailing to pavement or utilized a high strength adhesive. Defer to manufacturer specifications for use.

MAINTENANCE

- Perform routine inspections on manufactured linear sediment controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

BMP 1-13 COMPOST SOCKS AND BERMS

DESCRIPTION

Compost socks and berms are three-dimensional biodegradable filtering structures designed to intercept stormwater runoff where sheet flow may occur. Compost socks are generally composed of a biodegradable sock (e.g., jute or cotton) filled with compost via a pneumatic blower. Compost berms are constructed onsite utilizing equipment such as backhoe and or blower system and compacted.

APPLICABILITY

Suitable as an erosion and sediment control measure for:

- Perimeter controls
- Check Dams in Natural Ditches (Compost Socks Only)
- Downslope of exposed soils
- At storm drains as a form of inlet protection (compost socks only) (See BMP 1-07 Storm Drain Inlet Protection)
- As a berm for temporary stockpiles

For use on slopes of 2:1 or less.

DESIGN

Compost should meet the following specifications for quality, per the Caltrans Standard Special Provision 10-1, Erosion Control Blanket (Compost).

Compost socks and berms should be installed on level contours with the following slope grade breaks for Risk Level 2 and 3 projects under the CGP.

Slope	Maximum Interval
4:1	20 ft
4:1 to2:1	15 ft
2:1 or greater	>10ft

Compost socks and berms do not require trenching or temporary BMP removal and can remain in place following earth disturbing activities, or the compost components can be spread over the site. BMPs that remain in place are advantageous below embankments and adjacent streams as they limit further disturbance to sensitive areas.

Compost socks can be pre-seeded prior to installation or in the case of compost berms, after installation.

Drainage areas should not exceed 0.25 acres per 100 feet placement interval of these linear compost BMPs.

BMP 1-13 COMPOST SOCKS AND BERMS

Compost socks and berms can also be utilized on rocky and/or frozen ground.

LIMITATIONS

- Compost can potentially leach nutrients (phosphorus and nitrogen) into runoff and potentially impact water quality. Compost should not be used upstream of impacted waterbodies.
- Compost quality is highly variable.
- Compost berms should not be applied in areas of concentrated flows.
- Compost socks and berms are easily repaired, however, but are susceptible to damage by frequent traffic.
- Difficult to move once installed.

INSTALLATION

Prior to application, prepare locations for socks and berms by removing brush and thick vegetation. Full contact with the ground surface is necessary.

Utilize a pneumatic blower to apply compost.

For perimeter controls, place compost socks or berms in a j-hook formation. These areas should be flat or on a contour and away from areas where water could pond.

For toe of slope, place compost socks or berms at least 5 to 10 feet away.

Can be used in conjunction with other erosion control BMPs.

Compost Berms

Compost of the berm should be distributed evenly, compacted, and shaped trapezoidal in cross section. Berm design consists generally of a base two times the height.

Compost Socks

Compost socks should be assembled onsite by filling mesh socks with selected compost and tying off both ends. These ends can be interlocked until the desired length is achieved. Sock diameters are typically 12" to 18" in diameter.

Compost socks should be placed in contours perpendicular to sheet flow or in a v formation on a slope, anchoring with stakes through the center of the sock. To prevent water flowing around them, ends of compost socks should be placed upslope.

BMP 1-13 COMPOST SOCKS AND BERMS

MAINTENANCE

- Perform routine inspections on compost socks and berms weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Mend or reapply the compost sock or berm once damage is identified.
- Traffic should be limited to minimize damage to BMPs or vegetation establishment.

BMP 2-01 MATERIAL DELIVERY AND STORAGE

DESCRIPTION

Material Delivery and Storage Controls are procedural BMPs controlling the delivery and storage of construction materials, supplies and wastes so that storm water run-on and run-off and non-storm water discharges do not contact the material or wastes.

APPLICABILITY

For use on all construction sites where materials are delivered or stored and has the potential to be contacted by stormwater. This does not apply to materials and supplies stored on trucks that are driven on-site and off-site daily.

IMPLEMENTATION

Use the following BMP measures as appropriate:

- Only store the minimum amount of material that is needed for the job.
- Locate storage areas away from storm drain inlets, drainage systems, and watercourses to prevent storm water run-on from reaching the materials.
- If practical, store materials in enclosed storage bins such as cargo containers.
- Store materials on impervious surfaces or use plastic groundcovers and berms on bare soil to prevent spills or leakage from contaminating the soil.
- For known hazardous materials, keep materials covered using plastic or other waterproof materials.

- Store chemicals in watertight containers with appropriate secondary containment systems or, in a storage shed to prevent contaminated run-off/run-on from leaving storage areas.
- Keep an adequate supply of spill kit materials nearby.
- Ensure that qualified personnel are available when hazardous materials are delivered to ensure proper delivery and storage in a designated area.
- Safety Data Sheets (SDS) should be made available on-site for all materials stored that have the potential to come in contact with storm water.
- When a storage area is no longer needed, return it to original condition.
- Bagged materials such as cold patch, concrete mix, and other materials with the potential to pollute runoff should be

BMP 2-01 MATERIAL DELIVERY AND STORAGE

placed on pallets and covered during non-working day and prior to and during rain events.

LIMITATIONS

- Space limitations may limit indoor storage.
- Storage sheds may need to meet appropriate code requirements.

MAINTENANCE

- Repair or replace covers, containment structures, or perimeter controls as needed to ensure proper function.
- Perform routine inspections of labels on containers and designated delivery and storage areas.
- Perform routine inspections on BMP controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

BMP 2-02 MATERIAL USE

DESCRIPTION

Material Use is a procedural BMP that controls the amount or use of materials, chemicals and/or hazardous substances stored onsite and minimizes their potential for contact with storm water run-on or runoff or by non-storm water discharges.

APPLICABILITY

For use on all construction sites when the following materials are used onsite:

- Pesticides (herbicides, insecticides, and biocides).
- Fertilizers and soil amendments.
- Detergents.
- Petroleum products such as fuel, oil, and grease.
- Asphalt and other concrete components.
- Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds.
- Mastic, pipe wrap, primers, and paint.
- Concrete compounds.
- Welding material.
- Other materials that may be detrimental if released to the environment.

IMPLEMENTATION

- Only use products or materials onsite that have been approved through the Sempra Product Approval process.

- Reduce or eliminate use of hazardous materials on site when practical.
- Do not remove the original product label; it contains important safety and disposal information. Use the entire product before disposing of the container.
- Thoroughly dry empty latex paint cans, used brushes, paint rags, absorbent materials, and drop cloths. These dry wastes may be disposed of with other construction debris.
- When possible, mix paint indoors, otherwise use secondary containment structures. Do not clean paintbrushes or rinse paint containers into a street, gutter, storm drain, sanitary sewer, or watercourse.
- Dispose of any paint thinners, residue, and sludge that cannot be recycled as hazardous waste (see BMP 2-05). For water-based paint, clean brushes to the

BMP 2-02 MATERIAL USE

extent practical, and rinse into a concrete washout pit or temporary sediment trap. Do not allow liquid to discharge to a storm water conveyance system. For oil-based paints, clean brushes to the extent practical and filter and reuse thinners and solvents.

- If possible, recycle residual paints, solvents, non-treated lumber, and other materials.
- Do not over-apply fertilizers, pesticides, and soil amendments. Prepare only the amount needed. Strictly follow the recommended usage instructions.
- For applications of termite control pesticide refer to CASQA Fact Sheet WM-2 "Material Use." Note that termiticide can only be applied when it is done in accordance with all applicable federal, state, and local labeling requirements and in no case shall it be applied in a manner that would result in either a direct or indirect (e.g., drift) discharge to waters of the US or state.
- Keep an ample supply of spill cleanup material near use areas. Employees should be instructed in spill cleanup procedures.

MAINTENANCE

- Perform routine inspections on BMP controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Ensure employees and subcontractors throughout the job are using appropriate practices.

BMP 2-03 SPILL CONTROL

DESCRIPTION

Spill Control is a procedural BMP used to control, contain, and clean-up spills on site so that storm water run-on and runoff and non-storm water discharges do not become contaminated.

APPLICABILITY

This BMP is applicable to all construction sites where chemicals and/or hazardous materials and/or wastes are handled, used, or stored. Spill control procedures are implemented anytime chemicals (liquid or solid form) and/or hazardous materials and/or wastes are handled, used, or stored. A single handling, use, or storage of a hazardous material or waste is sufficient to trigger this requirement. Such substances may include, but are not limited to fuels, lubricants, solvents, fertilizers, pesticides, herbicides, soil binders, coolants, paints, and sewage.

To the extent that work can be accomplished safely, spills of materials or chemicals shall be contained and cleaned up immediately.

IMPLEMENTATION

- Install and maintain spill control and cleanup kits in areas where any chemicals and/or hazardous materials and/or waste are handled, used and/or stored.
- Construction Supervisor, Crew Foreman, or Facility Supervisor and sufficient onsite personnel should be trained in spill control to address potential spills on the site.

- Only staff trained on spill response procedure should be used to control spill.
- If the spill is a threat to life or the environment, or other emergency situation where emergency medical support, fire department response, or outside assistance is needed, immediately call the 911 Operator and the local emergency response agency (usually the local fire department).
- For all spills immediately notify the activity and site supervisor and/or the project environmental lead and describe the spill and current situation. The project environmental lead will make any required regulatory agency notifications per Environmental Standard (ES) G7841
- If possible, and if you have proper training and personal protective equipment, stop the flow of the spill. If it can be done

BMP 2-03 SPILL CONTROL

safely, contain the spill to a confined area. Containment may be able to be accomplished with:

  - Earthen berms
  - Sandbags
  - Absorbent socks and booms

- Containment material on site as part of the Spill Kit should reflect site characteristics. For guidance, request assistance from the Field Environmental Representative.
- To the extent that it doesn't compromise cleanup activities, spills shall be covered and protected from storm water run-on/-off during rain events.
- Immediately clean the impacted area, and properly dispose of any impacted materials.
- Spills shall not be buried, except as necessary for immediate interim containment purposes. Spilled material and impacted burial material must be removed as soon as possible after proper control and containment and properly disposed of.
- Use absorbent materials on spills to thoroughly clean up the material to the maximum extent possible. Spills shall not be diluted with water or other liquid for purposes of mitigating the spill (the solution to pollution is not dilution). When it is necessary to use water or other liquid for final cleaning and decontamination of a spill, the water or other liquid shall not be allowed to enter storm drain inlets, drainages, or watercourses, and shall be collected and disposed of properly. Coordinate disposal of these wastes with SDGE Hazardous Waste.
- Used clean up materials, contaminated materials, and recovered spill material shall be stored and disposed of in accordance with federal, state, and local regulations and BMP 2-05 "Hazardous Materials/Waste Management."

MAINTENANCE

- Perform routine inspections on BMP controls weekly, prior to forecasted rain events, daily during extended rain events, after the conclusion of rain events and or cleanup activity. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

BMP 2-04 SOLID WASTE MANAGEMENT

DESCRIPTION

Solid Waste Management is a procedural BMP used to minimize site non-hazardous solid waste generation and control the contact of site non-hazardous solid waste with storm water or non-storm water runoff. Solid waste includes, but is not limited to, the following:

Concrete, cement, asphalt rubble, masonry brick/block, vegetation debris, general trash, material used to transport and package construction materials (i.e., pallets), steel and scrap metals, pipe, electrical cuttings, and equipment parts.

APPLICABILITY

For use on projects that generate solid waste.

IMPLEMENTATION

- Practice good housekeeping and keep site clean.
- Use dry methods for site cleanup such as sweeping, vacuuming, and hand pick-up.
- Designate a waste storage area on site. If a designated waste storage area is not feasible, routinely remove wastes from the site.
- Prohibit littering by employees, contractors, and visitors.
- Trash receptacles with lids or weatherproof covers should be available on site and/or on construction vehicles.
- Cover or close lids of all waste containers at the end of each day and prior to rain.

- Protect wastes from being washed away by rain, storm water run-on, or other waters (irrigation, water line breaks, etc.).
- To prevent storm water run-on from contacting stored solid waste (stockpiled materials) use berms, secondary containment, covered dumpsters/roll-offs or other temporary diversion structures or measures (BMP 1-08 Stockpile Management).
- For materials with the potential for spills or leaks, stockpile the material on impervious surfaces or on plastic groundcovers to prevent spills or leaks from infiltrating into soils.
- Do not hose out or clean out dumpsters or containers at the construction site.
- Prevent solid waste and trash from entering and clogging storm drain inlets.

BMP 2-04 SOLID WASTE MANAGEMENT

- As practical, incorporate any removed clean sediment and soil back into the project.

MAINTENANCE

- Perform routine inspections of site, including storage area, dumpsters, stockpiles, and other areas where trash and debris are collected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Close trash can lids and dumpster covers at the end of each day and before rainy or windy conditions.

BMP 2-05 HAZARDOUS MATERIALS

DESCRIPTION

Hazardous Materials/Waste Management is a procedural BMP for the use, control, containment, and disposal of hazardous materials and waste. This BMP is to be used in conjunction with company Hazardous Waste and Materials Standards.

Examples of potential hazardous materials and waste requiring management control BMPs may include, but are not limited to:

- Petroleum products such as oil, fuel, grease, cold mix, and tar.
- Glues, adhesives, and solvents.
- Herbicides, pesticides, and fertilizers.
- Paints, stains, and curing compounds.
- Any materials deemed a hazardous waste in California, Title 22 Division 4.5, or listed in 40CFR Parts 110, 117, 261, or 302.

APPLICABILITY

Applicable to sites that have activities that involve the storage and use of hazardous materials or the generation of hazardous waste byproducts.

IMPLEMENTATION

- Only use products or materials onsite that have been approved through the Company Product Approval process.
- The amount of hazardous material stored at the site and the production and generation of hazardous waste at the site.

- Cover or containerize and protect from vandalism and exposure any hazardous materials and hazardous wastes.
- Clearly mark all hazardous materials and hazardous waste containers per the Environmental Standards. Place hazardous waste containers in watertight storage sheds for hazardous waste containers. Alternately, use secondary containment systems, but watertight storage sheds are preferred when hazardous waste containers are stored at the construction site.
- Hazardous materials and hazardous waste containers must meet DOT type and specifications per the Environmental Standards. The containers must be closed (hand tightened) during activity hours and securely tightened during non-activity hours.

BMP 2-05 HAZARDOUS MATERIALS

- Stockpiled cold mix should be placed on and covered with plastic.
- Mixing of construction waste materials is strictly prohibited.
- Storm water that collects within secondary containment structures must be inspected prior to being discharged to ensure no pollutants, oil sheens or non-stormwater discharges are present.
- Spills cannot be discharged to the environment from secondary containment (see BMP 2-03 "Spill Control").
- All secondary containment systems for hazardous materials or hazardous wastes must be able to hold the volume of the largest container in the storage area and, if uncovered, sufficient additional capacity for storm events. A general rule of thumb for Southern California is that the additional containment volume for an anticipated rain event can be approximated by adding at least an additional four inches (a 4-inch rain) to the height of the containment sized for the entire waste volume of the largest container (Based on the Los Angeles Area 10-year, 24 hour precipitation frequency and a 24-hour manned facility). However, even within Southern California, this varies by the geographic region precipitation frequency and the hours of operation of the facility (containment inspection frequency). Consult with your project environmental team for determining the minimum volume required for the specific situation and geographical location.
- Hazardous waste must be segregated from other solid waste and stored and disposed of properly according to the Environmental Standards. Only company approved vendors with current valid contracts in place will be used to manage or dispose of hazardous wastes.
- In addition to following this BMP and ES G8724, employees or contractors are responsible for compliance with federal, state, and local laws and regulations regarding storage, handling, transportation, and disposal of hazardous waste.

MAINTENANCE

- Perform routine inspections on BMP controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events to ensure that no hazardous materials or wastes have improperly been exposed to stormwater. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Routinely inspect the covers on hazardous material storage areas for tears or flaws and repair as necessary.

BMP 2-06 CONTAMINATED SOIL MANAGEMENT

DESCRIPTION

Contaminated Soil Management is a procedural BMP for the control of contaminated soils, or soils suspected of being contaminated, that are encountered during soil disturbance activities. Importation of fill shall also be managed in accordance with G8755 Import Fill Materials for Large Projects (>100 Cubic Yards), projects within Coastal Zone, and Environmentally Sensitive Areas.

APPLICABILITY

For use on all construction sites where soil is imported for fill, soil contamination is suspected or when contaminated soil is encountered during construction. Contaminated soils are especially encountered in urbanized or industrial areas where soil contamination may have occurred because of spills, illicit discharges, and leaks from underground storage tanks. Contaminated soils may also be encountered during digging and trenching activities on highway and roadways.

IMPLEMENTATION

Contaminated soil (including soil import that may be contaminated) shall be managed in accordance with the following procedures:

- Identify contaminated soil by looking for the following:
    - Soil that is discolored, black, gray, dark green, white; or
    - Soil that has an unusual odor, such as, petroleum, acid, alkaline, sewage, solvent, or any other chemical smell.
- If any potentially contaminated soil is detected, immediately discontinue the activity and contact the project's environmental lead.
- The CGP requires that the discharger sample and test contaminated soils to ensure proper handling and notify the appropriate local, State, and federal agencies, as well as the appropriate Regional Water Board if there is a reportable release event. A reportable release is a discharge or release of oil, hazardous materials or wastes, hazardous substances or chemicals in quantities that may be harmful to the public health. This includes non-stormwater discharges of any kind into the stormwater conveyance system.

BMP 2-06 CONTAMINATED SOIL MANAGEMENT

- Contaminated soils must also be managed properly per SDG&E or SoCalGas Environmental Standards (ES). See ES G8729; G8724; and G8755.

MAINTENANCE

- Inspect all imported fill for contamination per Environmental Standard G8755.
- Perform routine inspections of digging and trenching operations looking for contaminated soils and BMP controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- All contaminated soils must be managed properly in accordance with applicable federal, state, and local laws and regulations.

BMP 2-07 SANITARY WASTE MANAGEMENT

DESCRIPTION

Sanitary/Septic Waste Management is a procedural BMP for the control of sanitary/ septic wastes. Sanitary/Septic waste is considered human waste.

APPLICABILITY

For use on all sites that utilize portable sanitation facilities.

IMPLEMENTATION

Sanitary/septic wastes shall be managed by the following:

- Incorporate into regular safety meetings the education of employees, contractors, and suppliers on:
    - Potential dangers to humans and the environment from contact with sanitary/septic wastes due to bacteria, viruses, and parasites.
    - Approved sanitary/septic waste storage and disposal procedures.
- Use only reputable, licensed sanitary/ septic waste facility providers and haulers for sanitary facilities (portable toilets, hand wash stations, shower units) and their transportation to and from the construction site.
- Ensure that sanitary facilities are equipped with secondary containment to prevent discharge of pollutants to the storm water drainage system receiving waters or soils.

- Sanitary facilities should be located away from drainage systems and watercourses, minimizing the likelihood of leaks or spills contaminating waterways.
- Sanitary facilities should be located away from highways and roadways to avoid vehicles colliding with the sanitary units.
- When subjected to high winds, risk of high winds, or risk of vandalism, sanitary facilities shall be secured to prevent overturning.
- Sanitary wastewater should not be buried or discharged, except to a properly permitted sanitary sewer discharge facility. A permit is required from the local Sanitation District.
- Temporary sanitary facility's holding tanks shall be emptied by a licensed waste hauler prior to transport.

BMP 2-07 SANITARY WASTE MANAGEMENT

MAINTENANCE

- Perform routine inspections on sanitation facilities weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects. If stormwater has accumulated in secondary containment servicing should be performed.
- Ensure that sanitary/septic facilities are maintained in good working order and routinely serviced by a licensed service.
- When servicing of portable sanitary facilities is conducted, wash/rinsewater shall, not be allowed to runoff and shall be collected and disposed of properly in accordance with federal, state, and local requirements.

BMP 2-08 NON-HAZARDOUS LIQUID WASTE/ DRILLING FLUID MANAGEMENT

DESCRIPTION

Non-hazardous Liquid Waste/Drilling Fluid Management is a procedural BMP for managing non-hazardous liquid wastes.

Hazardous liquid wastes, including water with an oily sheen, should be managed using BMP 2-05 "Hazardous Materials/Waste Management."

Dewatering operations, and concrete slurry residue should be managed according to BMP 3-01, and BMP 3-05, respectively.

Non-hazardous Liquid wastes include, but are not limited to:

- Drilling slurries/muds and fluids, and wastewater and rinse water without an oil sheen (including pressure washing).
- Dredging spoil, and non-storm water liquid discharges that do not have discharge permits.

APPLICABILITY

Liquid waste management is applicable when construction sites generate any non-hazardous liquid byproducts, residuals, or wastes.

IMPLEMENTATION

- Vehicle and equipment cleaning using water is discouraged on site. If washing is required for safety or for the work, utilize BMP 3-03 "Vehicle and Equipment Washing."
- Drilling residue and drilling fluids should be disposed of in accordance with

federal, state, and local requirements. Coordinate the disposal of these wastes with your project environmental lead.

- Wastes generated from water laden with dredged material and drilling mud should be contained and not allowed to flow into drainage channels, storm drains, or receiving waters.
- Contain non-hazardous liquid wastes in a controlled area and manner, such as a lined pit, lined roll-off bin with a sealed bottom, or a portable tank.
- Storage tanks used for collecting and settling non-hazardous water shall be routinely checked for leaks and to ensure they are not overfilled.
- Piping used to connect storage tanks shall be routinely checked to ensure connections are secure and not leaking.
- Containment devices must be of sufficient quantity or volume to completely contain the liquid wastes generated and, if uncovered, any additional volume needed

BMP 2-08 NON-HAZARDOUS LIQUID WASTE/ DRILLING FLUID MANAGEMENT

for anticipated precipitation. A general rule of thumb for Southern California is that the additional containment volume for an anticipated rain event can be approximated by adding at least an additional four inches (a 4-inch rain) to the height of the containment sized for the entire waste volume. Contained material must be routinely removed and properly disposed of in accordance with federal, state, and local requirements.

- Do not locate containment areas or devices where accidental release of the contained liquid can threaten health or safety, or discharge to watercourses, storm drain system, or to a water body.
- Capture all liquid wastes running off a surface including wash water and rinse water from cleaning walls or pavement, including pressure washing.
- If the liquid waste is sediment laden, use a sediment trap (see BMP 1-10) or capture in a containment device and allow sediment to settle.
- Disposal of liquid wastes are subject to specific laws and regulations, or to requirements of other permits secured for the construction project. Contact your project environmental lead for further information.

MAINTENANCE

- Remove deposited solids from containment areas and containment systems as needed, and at the completion of the project. Soil,

dredged material and drilling mud to be transported offsite for reuse or disposal must first be profiled using chemical analysis. Liquid waste disposal may also need to be profiled prior to transportation and disposal. Contact the project environmental lead as far in advance of the anticipated transportation need as possible.

- Inspect containment systems routinely for damage, and repair as needed.
- Inspect BMP controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

BMP 3-01 DEWATERING

Contact the project environmental lead for permitting assistance if your project anticipates or requires dewatering during construction operations.

DESCRIPTION

Dewatering operations is a procedural BMP utilized for controlling the release of contained stormwater, subsurface or ground water in order to minimize sediment deposition and comply with local water quality standards and regulations. SDG&E currently has coverage under the ground water extraction permit (R9-2015-0013 for groundwater affected projects, the low threat waiver (R9-2019-0005), and the Statewide General Order for Discharges from Natural Gas Utility Construction, Operations, and Maintenance Activities (WQ 2017-0029-DWQ) for projects with gas work. When excavation/trench or hydrostatic test dewatering, also refer for Environmental Standard GS8741.

APPLICABILITY

This BMP is applicable when contained stormwater or groundwater from an excavation, trench, or non-storm water from a pipeline hydrostatic test needs to be discharged to land or surface waters.

This BMP does not apply to:

- Drilling mud or other products used in drilling foundations (see BMP 2-08)
- Utility vault or sub-structure dewatering (see BMP 3-06)

- Water from an unknown source or suspected to be contaminated. Contact project environmental lead for support.

LIMITATIONS

- Contained water cannot be pumped and directly discharged to the following devices without prior permit and associated BMP approval:
    - Municipal Sanitary Sewer
    - Municipal Separate Storm Sewer Systems (MS4) including Open Storm Drain Systems (Curb and Gutters)
    - Drainages (Natural or Constructed)
    - River, Stream, or Creek Beds (Wet or Dry)
    - Water bodies (Ponds, Lakes, Oceans)

BMP 3-01 DEWATERING

- Contained water from an excavation, trench, or non-storm water from a pipeline hydrostatic test cannot be discharged to land without applicable permit notifications, sampling, and landowner approval.

IMPLEMENTATION

Dewatering BMP Options (Note, all of the following BMPs must have approval from the environmental lead, and QSP or stormwater monitor prior to utilization and implementation):

- Dust Control – See BMP 4-08, can be utilized with a water buffalo or water truck. Retained stormwater may contain sediment therefore run-off is not allowed outside of project work boundaries or perimeters.
- Soil Compaction – See BMP 4-13, can be utilized to add moisture to prepared soils for proper compaction in backfill. Retained stormwater may contain sediment therefore run-off is not allowed outside of project work boundaries or perimeters.
- Overland Watering – See BMP 4-01, can be utilized in vegetated areas within project limits to promote infiltration of contained stormwater back into the soil. This option may not be effective in saturated or claylike soils. Retained stormwater may contain sediment therefore run-off is not allowed outside of project work boundaries or perimeters.
- Vacuum Trucks – Pumping and transport of contained stormwater needs prior approval to release. Consult with the environmental lead prior to any anticipated use of vacuum trucks.
- MS4 – Requires an additional permit or authorization from the local municipality district. District may require additional sampling, analysis, and a Batch Discharge Application (short-term discharge of estimated volumes). District may set a Numeric Action Limit (NAL) stricter than the Construction General Permit requirement. Additional fees and time schedule constraints may be applied to the project dependent on discharge volumes and pollutant loads. Consult with the environmental lead prior to any anticipated discharges to MS4s.
- Municipal Sanitary Sewer – May require advanced planning, permitting, and water treatment before discharge can be approved. Notifications to the State Water Resource Control Board (SWRCB), local Regional Water Quality Control Board (RWQCB), MS4 owner or operator, and Tribal Entities may be required. Local municipality jurisdictional permit (Flood Control District) may also be required. Additional sampling and analysis may be required depending on sediment and pollutant loads prior to discharge approval. May require additional water treatment, Activated Treatment Systems (ATS) or contaminant-free storage prior to release. Consult with the environmental

BMP 3-01 DEWATERING

lead prior to any anticipated discharges to Open Storm Drain Systems.

Dewatering observations and records shall be maintained in accordance with any permit requirements.

MAINTENANCE

- Inspect pumps, hoses, and all equipment before use and during operation to ensure proper operating conditions.
- Monitor discharge for any change in characteristics (amount of sediment, oil sheen, color, etc.)
- Observe dewatering to ensure discharges do not cause ponding, erosion, or discharge of potential pollutants.
- Perform routine inspections on BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Sampling of dewatering discharges should be done in accordance with permit requirements by an approved individual, if applicable.
- Operations and equipment should be made secure.

BMP 3-02 PAVING OPERATIONS

DESCRIPTION

Paving Operations is a procedural BMP for controlling non-storm water discharges associated with pavement surfacing or resurfacing, patching, or pavement removal.

Paving Operations activities may typically utilize the following materials:

- Cold mix
- Asphalt,
- Chip Seal, Seal Coat, Tack Coat, Slurry Seal, Fog Seal, and
- Portland Cement Concrete.

For pavement grinding, saw cutting, coring or drilling, refer to BMP 3-05 "Concrete/Coring/ Saw cutting and Drilling Waste Management."

APPLICABILITY

For use on all sites where paving operations are being conducted.

IMPLEMENTATION

- Protect storm drain inlets near work and down gradient of the area to be paved (see BMP 1-06 "Storm Drain Inlet Protection").
- If onsite mixing is planned, an area must be designated for conducting the mixing. This area should already be paved or made impervious (e.g., plastic or wood sheeting) and be located away from storm drain inlets, drainages, or watercourses.

- Minimize overspray of tackifying emulsions or placement of other paving materials beyond the limits of the area to be paved. Schedule the application of tackifying agents according to manufacturer's instructions regarding rain events.
- Use dry methods to clean equipment and conduct cleaning in accordance with BMP 3-03 "Vehicle and Equipment Washing."
- Material use and stockpiles are to be managed in accordance with BMP 2-02 "Material Use" and BMP 1-08, "Stockpile Management.
- Collect and remove all broken asphalt and concrete, recycle when feasible, and dispose of materials in accordance with local, state, and federal requirements.
- Do not apply asphalt, concrete paving, seal coat, tack coat, slurry seal or fog seal

BMP 3-02 PAVING OPERATIONS

if rain is expected during the application or curing period.

- Avoid, if possible, the transferring, loading, or unloading of paving materials near storm drain inlets, drainages, or watercourses. If not possible, use BMP 1-06 "Storm Drain Inlet Protection."
- CGP Risk Level and Type 2 & 3 projects and projects with pH related TMDLs that construct concrete structures onsite or store concrete mixing materials onsite, are subject to Numeric Effluent Limits for those drainage areas of the project where the concrete construction or storage of concrete mixing or waste materials take place.

MAINTENANCE

Inspect and maintain equipment and machinery routinely to minimize leaks.

BMP 3-03 VEHICLE AND EQUIPMENT WASHING

DESCRIPTION

Vehicle and Equipment Washing is a procedural BMP for controlling vehicle and equipment washing on construction or operation and maintenance activity sites. Onsite washing of vehicles and equipment shall only be conducted when prior authorization has been received from the environmental lead.

APPLICABILITY

For use on all sites when vehicle and equipment cleaning is being performed. Note that construction site vehicle and equipment washing is not typically performed on utility type construction sites unless required by safety or environmental considerations as is necessary for work completion.

IMPLEMENTATION

Use the following methods as applicable:

- Use dry cleaning methods such as wiping down, rather than water washing vehicles or equipment.

If onsite vehicle washing is authorized by the Field Environmental Representative project environmental lead, use the following general methods:

- Vehicle and equipment washing must be located away from storm drain inlets, drainage systems, or watercourses.
- Place secured impermeable liners, sandbags or another type of berm around storm drain inlets and drainage

systems to prevent wash water from entering a storm inlet, drainage system, or watercourse. Secured, impermeable liners are preferable to sandbags. Sandbags are preferable over gravel bags because they are less porous, and more effective at preventing water and pollutants from passing through the barrier.

- Never discharge wash water to the storm drain system, drainages, watercourses, or water bodies.
- Use as little water as possible. High-pressure sprayers may use less water than a hose.
- Use a positive shutoff valve to minimize water usage.
- Collect all wash and rinse water for proper disposal.

MAINTENANCE

Monitor employees and contractors through the duration of the construction project to ensure appropriate practices are being implemented.

BMP 3-04 VEHICLE AND EQUIPMENT FUELING

DESCRIPTION

Vehicle and Equipment Fueling is a procedural BMP for controlling vehicle and equipment fueling at construction and operation and maintenance activity sites.

APPLICABILITY

For use on all sites when vehicle and equipment fueling is being performed.

Implementation

- If practicable, fuel vehicles and equipment offsite.
- Fuel storage and fueling areas should be located away from storm drain inlets, drainage systems, watercourses, and water bodies.
- All fueling will be conducted with the fueling operator in attendance at all times regardless of if fuel nozzles are equipped with automatic shutoff features.
- Fuel tanks shall never be "topped off."
- All fueling operators should have readily available spill containment and cleanup equipment and materials directly adjacent to fueling operations.
- Clean up drips and spills immediately, and properly dispose of contaminated materials. Contact environmental leads if any spill occurs.
- Properly store and dispose of rags and absorbent material used to cleanup spilled fuel.

- Mobile fueling trucks and operators must have all necessary permits, licenses, and training.

MAINTENANCE

Check to ensure that there is an adequate supply of spill cleanup materials available.

Perform routine inspections of designated fueling areas and inspect vehicles and equipment for leaks.

Report all spills immediately to the project Supervisor and project environmental leads.

BMP 3-05 CONCRETE CORING SAW-CUTTING AND DRILLING WASTE MANAGEMENT

DESCRIPTION

Concrete/Coring/Saw Cutting and Drilling Waste Controls are procedural BMPs for the proper management of liquid and solid wastes from concrete/coring/saw-cutting and drilling activities.

For managing any concrete curing compounds, also use BMP 2-05 "Hazardous Materials/ Hazardous Waste Management." For managing paving operations, use BMP 3-02.

APPLICABILITY

Applicable to activities that utilize concrete, asphalt or slurry; or when pavement or concrete wastes are generated. These include:

- Saw-cutting
- Coring/drilling
- Grinding, re-paving or patching
- Encasing conduit in concrete
- Utility tower footings

IMPLEMENTATION

- Install storm drain inlet protection at any down gradient inlets that may be impacted per BMP 1-06 "Storm Drain Inlet Protection."
- Minimize the amount of water used during coring/drilling or saw-cutting. During wet coring or saw-cutting, use a wet vacuum to lift the slurry from the pavement as the coring or saw-cutting progresses.
- If concrete residue remains after drying, the area should be swept in a timely manner and residue removed to avoid contact with storm water or entering a storm drain or water body system via wind. If concrete residue still remains, pressure wash the surface, with in-progress vacuum recovery of wash water to remove residual material.
- Do not wash residue or particulate matter into a storm drain or drainage inlet or a watercourse or water body.
- The following options should be used for concrete truck chute and/or pump and hose washout:
  - If available, arrange to use an existing concrete washout station. Upon entering the site, concrete truck drivers should be instructed about proper site practices and locations of washout stations.

BMP 3-05 CONCRETE CORING SAW-CUTTING AND DRILLING WASTE MANAGEMENT

- Concrete Washouts:
  - Washout stations can be: self-contained concrete trucks; commercial portable washout stations (rent-a-washout); plastic lined temporary pits, or a bermed and lined area designed with sufficient volume to completely contain all liquid and waste concrete materials plus enough capacity for rainwater. The lining must be impervious (such as Visqueen with no holes or tears). The designated area must be located away from storm drain inlets, drainages, watercourses, or water bodies. Washouts should be covered at the end of each workday.
- Washout in Trench:
  - Manually rinse the concrete truck chute into the lined trench itself. Note that this practice is not allowed on CGP projects, where minimum BMPs in the permit require containment of concrete washout areas and prohibits discharge into the underlying soil or surrounding areas. Check with the project environmental lead regarding site-specific applicability.
- Bucket Washout:
  - Manually rinse the chute into a wheelbarrow, plastic bucket or pail, and then empty the bucket into the concrete truck barrel or on top of the placed concrete within a trench or excavation. Prevent or protect against spillage and clean up any spillage promptly.

- CGP Risk Level and Type 2 & 3 projects and projects with pH related TMDLs that construct concrete structures onsite or store concrete mixing materials onsite, are subject to Numeric Effluent Limits for

BMP 3-05 CONCRETE CORING SAW-CUTTING AND DRILLING WASTE MANAGEMENT

those drainage areas of the project where the concrete construction or storage of concrete mixing or waste materials take place.

MAINTENANCE

- Responsible personnel should ensure that all drivers of concrete trucks arriving onsite are instructed about proper project practices.
- Clean out designated washout areas as needed or at a minimum when the washout is 75 percent full to maintain sufficient capacity throughout the project duration. Add additional designated areas as necessary and available to maintain capacity.
- Any designated onsite washout areas must be cleaned out and all debris removed upon project completion. Dispose of concrete waste according to BMP 2-04 "Solid Waste Management."
- Inspect routinely, when washout activities are underway to ensure the integrity of the concrete washout lining and that the concrete washout does not overflow.

BMP 3-06 DEWATERING UTILITY VAULTS

DESCRIPTION

Dewatering Utility Vaults is a procedural BMP for controlling water from dewatering utility vaults and underground structures.

APPLICABILITY

This BMP is applicable whenever water must be removed from SDG&E utility vaults and underground structures.

- This BMP does not apply to:
- Drilling mud or other products used in drilling foundations (see BMP 2-08)
- Trench, excavation or other general dewatering from construction activities (see BMP 3-01)
- Water that is known, or expected to be, contaminated. Contact project environmental for support.

LIMITATIONS

An SDG&E-approved filter system with hydrocarbon removal capability is required to be used on the pump discharge for compliance assurance when dewatering to a surface water (drainage, gutter, storm drain inlet, or a water body).

IMPLEMENTATION

SDGE follows the General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters (Order No. 2014-0174-DWQ General Permit No. CAG990002) and the Low Threat Waiver (R9-2019-0005).

Prior to discharge the water in the vault should be accessed. If the water to be discharged is identified as “Clear Water” as described in the environmental standards, then discharge to storm drains, drainages or water bodies is acceptable as long as the discharge does not cause nuisance or harm to the environment.

Water discharged to the street, gutter, drainages, watercourses, or water bodies must be clean and clear, with no evidence of oil sheen and no chemical or sewage smell.

BMP 3-06 DEWATERING UTILITY VAULTS

The dewatering discharge must be monitored at all times during the discharge to ensure the discharge is "clean and clear" with no chemical or sewage odor. If the characteristics of the discharge change (i.e., color, smell, sheen), the discharge must be stopped immediately. In such an event contact the project environmental lead.

Whenever possible, discharge the clean, clear water directly to the storm drain, drainage, or water body to avoid pre-existing pollutants in the discharge path. Pre-existing soil or contaminants in the path of the discharge (i.e., gutter) that can discolor/contaminate the discharge need to be cleaned up before discharging vault water.

Discharge from the filter system must be clean and clear at all times, and if not, the discharge must be stopped.

If the water, because of sediment or pollutant contamination, cannot be discharged to the environment, contact the project environmental lead for transport of the water in an approved manner.

MAINTENANCE

- Inspect pumps, hoses, and all equipment before use and during operation to ensure proper operating conditions.
- Monitor discharge for any change in characteristics (amount of sediment, oil sheen, color, etc.)
- Observe dewatering to ensure they do not cause erosion or discharge of potential pollutants.
- Perform routine inspections on BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Sampling of dewatering discharges should be done in accordance with permit requirements, if applicable.

Contact project environmental for assistance if your project requires dewatering of utility vaults or underground structures.

BMP 3-07 OVERWATER PROTECTION

DESCRIPTION

Over-Water Protection is a procedural and containment system BMP for protecting watercourses from overhead construction and maintenance and repair activities.

- Over-water construction and maintenance activities include, but are not limited to; chipping, grinding, scraping, welding/ burning, painting, wrapping and coating of pipes and conduits.
- Watercourses (dry or wet) include drainages, creeks, streams, rivers, lakes, wetlands, bays, estuaries, and oceans.

APPLICABILITY

For use on projects that have construction activities above watercourses (dry or wet).

DESIGN

- Containment systems must be properly designed and installed prior to the beginning of any operation that may impact a water body to prevent discharge of pollutants to surface waters, considering the construction or maintenance activity and factors such as wind, rain, etc.

LIMITATIONS

Dredge and fill activities are regulated by the US Army Corps of Engineers and Regional Boards under Section 404/401 of the Clean Water Act. Prior to conducting over-water activities, the project environmental lead should be consulted for any permit requirements.

INSTALLATION

- The work area should be kept clean of all trash and potential pollutants.
- Containment booms should be placed around the area of work as necessary to contain the discharge of potential contaminants such as oil and hydraulic fluid.
- Special attention should be given to existing and forecasted wind and weather conditions to prevent pollutant discharges to surface waters.
- Shrouds of appropriate material should be used to prevent paint overspray, welding slag, and other pollutants from entering surface waters. Shrouding may not be

BMP 3-07 OVERWATER PROTECTION

effective during periods of high wind.

- Shrouds should be large enough to adequately enclose or segregate the working area from surface waters. This may include a plywood barrier, Visqueen, and scaffolding to help prevent fugitive material from entering surface waters.
- Support structures such as scaffolding shall be used in conjunction with shrouding to withstand potential wind stress.
- Contaminated shrouding material and equipment shall be thoroughly cleaned or disposed of properly.

MAINTENANCE

- Perform routine inspections on containment systems, shrouds, and support structures weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

BMP 3-08 PAINT REMOVAL CONTROL

DESCRIPTION

Paint Removal Control is a procedural BMP for protecting storm water and water courses from mark-out paint or graffiti paint removal activities.

APPLICABILITY

Use this BMP when utility activities have used mark-out paint on surfaces and the paint is required to be removed by local jurisdictions or another authority, or when graffiti on company property is discovered and must be removed.

IMPLEMENTATION

- Use non-toxic, light degradable mark-out paint when possible.
- Avoid the use of chemical paint removers whenever possible. When chemical paint removers are required, only use products that have been approved through the product review process and utilize containment and wet vacuuming of material during the removal process.
- Use one or more of the following methods to promptly and effectively contain and remove paint and residues in order to protect storm water sewers, drainages, and watercourses:
    - Dry sweep.
    - Install storm drain inlet protection at down gradient inlets during hydro pressure

washing, wet abrasive blasting, grinding, and chemical removal. Discharge of any wet or dry residuals or wash water to the drainage system is prohibited.

- Minimize the amount of water used during hydro pressure washing.
- Wet or dry vacuum.
- Use wet vacuum to lift the paint slurry from the pavement or surface as hydro pressure washing progresses or as soon as possible, and before the material has a chance to migrate from the work area.
- If wet vacuuming is not adequate to capture all wastewater from these activities,

BMP 3-08 PAINT REMOVAL CONTROL

use additional containment (sandbags, booms, or other containment devices) methods as near the work area as possible to prevent the discharge to a street, gutter, storm drain/ drainage inlet, or watercourse.

- o If paint residue remains after drying, the area should be swept up and residue removed in a timely manner to avoid contact with storm water.
- o If paint residue remains after sweeping, the area can be water washed, as long as the water containing the paint residue is contained near the work and wet vacuumed and not allowed to enter storm drain inlets or watercourses.
- o All waste should be disposed of using the BMP 2-08 "Non-Hazardous Liquid Waste Management."

MAINTENANCE

- Inspect all containment systems to ensure proper placement prior to starting utility paint removal operations.
- Inspect equipment frequently and adjust as necessary to maximize efficiency and minimize water or other material use of the paint removal.

BMP 3-09 STREAM CROSSING

DESCRIPTION

A stream crossing is a culvert, ford, or bridge placed across a waterway to provide access for construction or operations and maintenance activities. Utility stream crossings are not intended to maintain public traffic and project-specific permits may be required for use (see "Limitations"). The crossing design and construction allows safe access and reduces erosion and downstream sediment from vehicles.

The project environmental lead should be consulted for any permit requirements and for the stream crossing location.

APPLICABILITY

Temporary stream crossings are installed at sites when:

- Appropriate permits have been secured for activities and for the stream crossing.
- Construction or operation and maintenance equipment or vehicles need to frequently cross a waterway.
- Alternate access routes impose significant constraints.
- Crossing perennial streams or waterways without a stream crossing causes significant erosion.

DESIGN

- Culverts: Appropriate to control erosion but may cause erosion during installation/ removal without appropriate BMP

measures. Easily constructed and allows for heavy equipment loads.

- Fords: A ford is a streambed crossing alternative that involves crossing a waterbody at grade, on a hard surface maintained at the streambed bottom. Appropriate during dry weather and in arid areas in dry washes, ephemeral streams, and low-flow perennial streams. Ford crossings generally involve the placement of gravel or other non-erodible material to facilitate crossing and are appropriate for streams that would benefit from additional clean native or compatible gravel, for example, salmonid streams or rivers below reservoirs, and urban, channelized streams. Fords provide minimum sediment and erosion control in a stream channel and are most appropriate when the potential for stream channel erosion and dislodgement of sediment due

BMP 3-09 STREAM CROSSING

to the addition of the material and traffic is low. A ford is the least expensive stream crossing, allows for maximum load limits, and offers very low maintenance. Fords may degrade water quality due to vehicle and equipment contact. Direct placement of gravel may be appropriate for short-term use. In addition, soil-confinement systems can also be used in low-flow intermittent stream crossings for ease with implantation and removal. Examples include:

- Cellular Confinement Systems (CCS) crossings consist of three-dimensional cellular-type material placed on the streambed bottom and filled with rock or soil. CCSs are an effective option when used in conjunction with ford crossings because it is sufficient to support most construction equipment and is readily removable.
- Articulated concrete mats (e.g., concrete blocks held together by steel cable or interlocking concrete blocks) can also be used for fording a stream. Articulated concrete mats can be used to harden the streambed for crossing. Gravel should be placed on the mats to fill in the voids between concrete blocks.
- Gabion mattresses consisting of rock contained in rectangular, wire-mesh can also be used for constructing a hard driving surface. Gabion mattresses are strong and durable, flexible structures, and are easily constructed.

- Bridges: Appropriate for streams with high flow velocities, steep gradients, and where temporary restrictions in the channel are not allowed. Bridges are more expensive to design and construct but provide the least streambed disturbance and waterway flow constriction.

LIMITATIONS

- Designs and installations of stream crossings should be prepared by a California Registered Civil Engineer, and bridges should be prepared under a California registered structural engineer.
- Installation may cause a waterway constriction, which can obstruct flood flow and cause flow backups, washouts, and/or scouring.
- Installation may require RWQCB 401 Certification, USACOE 404 permit and approval by the California Department of Fish and Game. Permits may require sampling and testing.

BMP 3-09 STREAM CROSSING

- Installation and removal will usually disturb the waterway and may require dewatering or temporary stream diversion.
- Soil confinement systems used for stream crossings must be constructed in accordance with the manufacturer's specifications and inspected and maintained for structural integrity.
- Gravel use in the stream for soil-confinement system crossings will require agency approval.
- Requires other BMPs to minimize soil disturbance during installation and removal.
- Construction activities should not last longer than one year, more permanent installations will need to be considered for longer projects.

INSTALLATION

- Sediment traps should be installed immediately downstream of the crossing to capture sediment and may be required by the crossing permit. For CCS ford crossings, the gravel depth should be 6 to 12-inches to support construction vehicular traffic. Clean, washed, angular or rounded gravel should be used with cellular-block confinement systems.
- Avoid oil or other potentially hazardous materials for surface treatment.
- Stabilize construction roadways, work area, and streambed bottom against erosion. Stream bed and bank stabilization, if necessary, may also be required to be part of the crossing permit.
- Construct during dry periods to minimize stream disturbance and reduce costs.
- Construct at or near the streambed elevation to prevent potential upstream flooding. Install erosion control BMPs to minimize erosion of embankment into flow lines.
- Any artificial obstruction placed within flowing water should only be built from material that will not introduce sediment or silt into the watercourse.
- Vehicles and equipment should not be driven, operated, fueled, cleaned, maintained, or stored in the wet or dry portions of a water body. Wetland vegetation, riparian vegetation, or aquatic organisms could be destroyed.
- The exterior of vehicles and equipment that will encroach on the water body should be maintained free of grease, oil, fuel, and residues.
- Drip pans should be placed under all vehicles and equipment placed over water bodies (e.g., bridges) when the equipment is planned to be idle for more than one hour.
- Disturbance or removal of vegetation should not exceed the minimum necessary to complete operations. Disturbed vegetation should be replaced with the appropriate soil stabilization measures.

BMP 3-09 STREAM CROSSING

- Riparian vegetation, when removed pursuant to the work provisions, should be cut off no lower than the ground level to promote rapid re-growth. Access roads and work areas built over riparian vegetation should be covered by a sufficient layer of clean river run cobble to prevent damage to the underlying soil and root structure. The cobble must be removed upon completion of project activities.

MAINTENANCE

- Perform routine inspections on BMP controls weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Check for blockage in the channel, sediment buildup or trapped debris in culverts, blockage behind fords or under bridges.
- Check for erosion of abutments, channel scour, riprap displacement, or other signs of erosion.
- Check for structural weakening of the crossings, such as cracks, and undermining of foundations and abutments.
- Remove sediment that collects behind fords, in culverts, and soil confinement systems. Removal of undesirable sediment may be required to be part of the crossing permit.
- Replace lost or displaced support aggregate from inlets and outlets of culverts and soil confinement systems.
- With proper BMPs, remove temporary stream crossings promptly when it is no longer needed.

BMP 3-10 CLEAR WATER DIVERSION

DESCRIPTION

Clear water diversion is a system of structures and measures that intercept clear surface water runoff upstream of a construction project or operation and maintenance activity, transport it around the work area, and discharge it downstream with minimal water quality degradation. It encloses a construction area in a waterway and reduces sediment pollution from construction in, or adjacent to water. Structures commonly used as part of this system include diversion ditches, berms, dikes, slope drains, rock, gravel bags, wood, aqua barriers, cofferdams, filter fabric or turbidity curtains, drainage or interceptor swales, pipes, or flumes.

APPLICABILITY

- A clear water diversion is typically implemented where appropriate permits have been secured and work must be performed in a flowing stream or water body.
- Pumped diversions are suitable for intermittent and low flow streams.
- Excavation of a temporary bypass channel, or passing the flow through a flume with a trench excavated under it, is appropriate for the diversion of streams less than 20 feet wide, with flow rates less than 100 cubic feet per second.
- Clear water diversions incorporating clean washed gravel may be appropriate for use in fish spawning streams.

IMPLEMENTATION

- Where working areas encroach on flowing streams, barriers adequate to prevent the flow of muddy water into streams should be constructed and maintained. During construction of the barriers, stream muddying should be minimized.
- Diversion structures must be adequately designed to accommodate fluctuations in water depth or flow volume due to tides, storms, floods, etc.
- Equipment driven in a water body should be clean of petroleum residue, and water levels should be below the fuel tanks, gearboxes, and axles, unless lubricants and fuels are sealed such that water inundation will not result in pollutant discharges.
- Only excavation equipment buckets may

BMP 3-10 CLEAR WATER DIVERSION

reach out into the water body to remove or place fill. The main equipment body should not enter the water except as necessary to cross the stream to access the work site.

- Stationary equipment, such as motors or pumps located within or adjacent to a water body, should be positioned over drip pans.
- When any artificial obstruction is being constructed or maintained, sufficient water should at all times pass downstream to maintain aquatic life.
- Equipment should not park below high-water marks unless allowed by permit.
- Disturbance or removal of vegetation should be minimized. Disturbed vegetation should be replaced with appropriate erosion control measures.
- Riparian vegetation, when removed pursuant to the work provisions, should be cut off no lower than the ground level to promote rapid re-growth. Access roads and work areas built over riparian vegetation should be covered by a sufficient layer of clean river run cobble to prevent damage to the underlying soil and root structure. The cobble must be removed upon completion of project activities.
- Drip pans should be placed under all vehicles and equipment placed structures over water bodies when the equipment is planned to be idle for more than one hour.
- Where possible, minimize diversion and encroachment impacts by scheduling construction during periods of low flow. Scheduling should also consider seasonal releases of water from dams, fish migration, and spawning seasons, and water demands due to irrigation.
- Construct diversion structures with materials free of potential pollutants such as soil, grease, or oil.

Several types of clear water diversions are detailed in the CASQA Handbook and should be consulted in their use. These include:

- Temporary Diversions and Encroachments
- Temporary Dry Construction Areas
- Filter Fabric Isolation
- Turbidity Curtain Isolation
- K-Rail River Isolation
- Stream Diversions

LIMITATIONS

- Diversion activities will usually disturb the waterway during installation/removal.
- Installation may require RWQCB 401 Certification, USACOE 404 permit and approval by California Department of Fish and Game. If numerical water quality standards are mentioned in any permits, sampling and testing may be required.
- Diversion activities may constrict the

BMP 3-10 CLEAR WATER DIVERSION

waterway, obstruct flood flows, and cause flooding or washouts. Diversion structures should not be installed without identifying potential impacts to the stream channel.

- Diversion or isolation activities are not appropriate in channels where there is insufficient stream flow to support aquatic species in the dewatered area or if they will disturb sensitive aquatic species.
- Diversion or isolation activities are inappropriate in deep water unless designed and reviewed by a California Registered Civil Engineer.
- Diversion or isolation activities should not completely dam stream flow.
- Dewatering and removal may require additional sediment control or water treatment.

MAINTENANCE

Ensure that activity based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are underway perform routine inspections weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

BMP 4-01 PRESERVATION OF EXISTING VEGETATION

DESCRIPTION

Preservation of Existing Vegetation is a procedural BMP that maximizes the preservation of existing trees, shrubs, bushes, and grasses on a construction or operations and maintenance activity site.

APPLICABILITY

This BMP is applicable to any utility activities when there is existing vegetation.

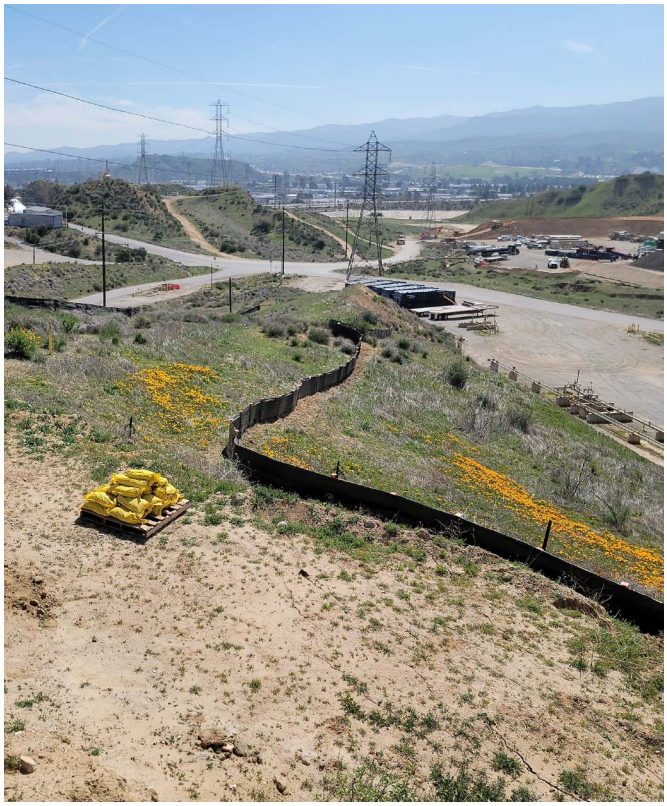
DESIGN & IMPLEMENTATION

Use the following measures as applicable:

- Preserve existing vegetation whenever possible.
- Identify areas to be preserved in the immediate vicinity of the construction or activity site, and mark as appropriate before clearing and grubbing or other soil disturbance activities under the guidance of environmental staff.
- Whenever possible, minimize disturbed areas by locating temporary roadways to avoid stands of trees and shrubs and follow existing contours to reduce cutting and filling.
- Construction materials, equipment storage and parking areas should be located outside the drip line of any tree to be retained.
- Consider the impact of grade changes to existing vegetation and the root zone.
- Remove any markings, barriers, or fencing after project is completed.

MAINTENANCE

Maintain the clearly marked limits of disturbance during construction to preserve vegetation.



BMP 4-02 TEMPORARY SOIL STABILIZATION

DESCRIPTION

Temporary Soil Stabilization is a procedural BMP utilizing protective materials to cover exposed soil, where the soil exposure is caused by construction or operation and maintenance activities. Materials may include hydraulic mulch and seeding, soil binders, straw, geotextiles, plastic covers and erosion control blankets.

Temporary soil stabilization BMPs and their associated materials include:

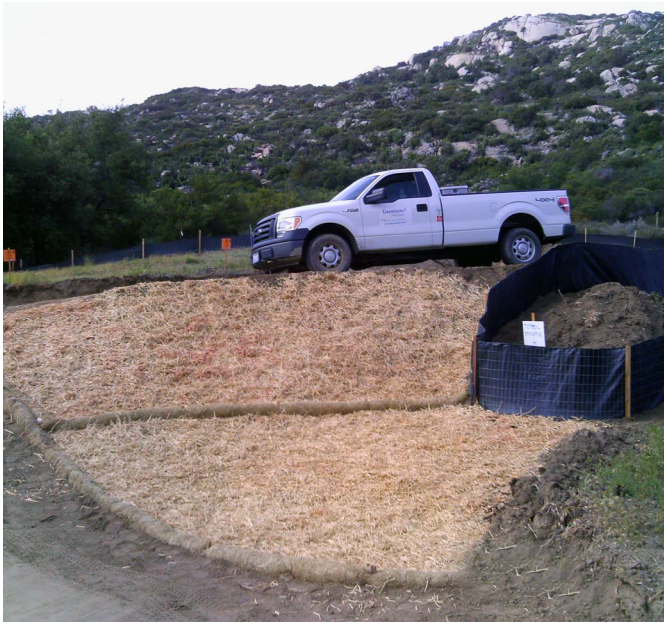
- BMP 4-03 - Hydraulic Mulch
- BMP 4-04 - Hydroseeding
- BMP 4-05 - Soil Binders
- BMP 4-06 - Mulch
- BMP 4-07 - Geotextiles, Plastic Covers and Erosion Control Blankets/Mats

APPLICABILITY

This BMP, and the situation appropriate BMPs listed above, is applicable when slopes are constructed or disturbed and/or where there are inactive soil disturbance areas that will not be worked or scheduled for work for 14 days or longer. The procedures are to be implemented after slope construction activity is complete and prior to the onset of precipitation.

DESIGN

- Soil binders (BMP 4-05) may be applicable to areas where there is light traffic that would minimize the effectiveness of other temporary soil stabilization BMPs.



- Sediment control BMPs used to break up the slope lengths, such as fiber rolls (BMP 1-03) or gravel bag berms (BMP 1-04) should be spaced in accordance with the CGP requirements (see installation for BMP 1-03 “Fiber Rolls”).
- Permanent erosion control shall be applied to areas deemed substantially complete during the project’s defined seeding season window.
- Refer to individual temporary soil stabilization BMPs for specific instructions for use (see BMP 4-03 through BMP 4-07).

MAINTENANCE

- Refer to individual temporary soil stabilization BMPs listed above for maintenance requirements.

BMP 4-03 HYDRAULIC MULCH

DESCRIPTION

Hydraulic Mulch is a procedural BMP for applying mulch to protect the soil surface from wind and rain erosion.

Mulch consists of a mixture of shredded wood fiber or other fiber mixed with water and a stabilizing emulsion or tackifier. The mulch is applied with hydro-mulching equipment.

APPLICABILITY

For use on disturbed soil areas that will be disturbed following construction inactivity of 14 or more days or require temporary stabilization to minimize erosion. This can include soil stockpiles and slopes.

DESIGN

Hydraulic mulch is applied as a liquid slurry utilizing a hydro-mulching equipment at application rates recommended by the manufacturer.

Typical hydraulic mulch rate applications rates range from 2,000 lbs. an acre for standard hydraulic mulch to 3,500 lbs. per acre for Bonded Fiber Matrix (BFM). However, the required amount of hydraulic mulch to ensure full coverage may change based on the roughness of the soil or by the slope gradient, refer to manufacturer guidelines for product specifications.

Hydraulic Mulch

- Consists of wood fiber mixed with a stabilizer

- Applied as a liquid slurry utilizing a hydroseeding machine at manufacturer recommended rates.
- Typical Lifespan of less than 3 months.
- Must be applied at least 24 hours in advance of rainfall.
- Not recommended for slopes in excess of 3:1 or course soils.

Hydraulic Matrices

- Is a combination of wood and or paper fiber mixed with polymer binders.
- Applied as a liquid slurry utilizing a hydroseeding machine at manufacturer recommended rates.
- Typical Lifespan of 6-12 months
- Must be applied at least 24 hours in advance of rainfall

BMP 4-03 HYDRAULIC MULCH

Bonded Fiber Matrix (BFM)

- Is a combination of fibers mixed with polymers and other chemical crosslinks.
- Applied as a liquid slurry utilizing a hydroseeding machine at manufactured recommended rates to form an erosion resistant blanket that promotes vegetation established and prevents soil erosion. Typical Lifespan of 6-12 months
- Should not be applied immediately before, during, or after a rain event.

LIMITATIONS

- Hydraulic mulches are not a standalone BMP for final stabilization.
- A water supply is needed for application
- Must be applied at least 24 hours in advance of rainfall to cure
- Cannot be disturbed by walking or driving on the surface after application

INSTALLATION

- When feasible roughen embankment and fill areas with a crimping or punching type roller or by track walking prior to application.
- Avoid mulch over-spray onto the traveled way, sidewalks, lined drainage channels, and existing vegetation.
- Avoid use of mulch without a tackifier component, especially on slopes.
- Mixed hydraulic mulches can be applied from a tower sprayed on top of a hydroseeding machine or by extending a hose and nozzle to adjacent areas.
- Apply hydraulic mulch from multiple directions to adequately cover soil. Application from a single direction can result in shadowing, uneven coverage, and BMP failures.

MAINTENANCE

- Maintain an unbroken, temporary mulched ground cover throughout the period of construction when the soils are not being reworked.
- Perform routine inspections on BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within

BMP 4-03 HYDRAULIC MULCH

72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

- Areas where erosion is evident should be repaired and BMPs re-applied as soon as possible. Care should be exercised while making repairs, as previously sprayed areas can be easily damaged.

BMP 4-04 HYDROSEEDING

DESCRIPTION

Hydroseeding is a procedural BMP for the application of vegetation seed in a protective mixture for both soil and seed. The seed then sprouts, providing vegetation that provides additional soil erosion control (holds the soil in place and shields the soil from erosion). Hydroseeding material typically consists of a mixture of fiber, seed, stabilizing emulsion, in in some applications, fertilizer.

APPLICABILITY

- For use on disturbed soil areas that will not be re-disturbed prior to project completion.
- For purposes of establishing site vegetation

DESIGN

Confirm with project environmental lead for requirements on appropriate seed mix and application rates and usage of fertilizer, if any.

Prior to application, soil should be prepared to receive the seed by disking or otherwise scarifying the surface to provide a favorable environment for seed germination and growth. See BMP 4-13. [Soil Preparation]

Hydroseeding can be accomplished one of two ways:

One Step Process

Seed is applied along with the hydraulic mulch and any tackifiers in one application.

Multiple Step Process

In a multiple step process, seed is applied first, followed by mulch or a rolled erosion control product.

LIMITATIONS

- Avoid use of hydroseeding in areas where the BMP would be incompatible with site conditions. These conditions include:
    - Slopes steeper than 1:3 vertical: horizontal. Steep slopes are difficult to protect with temporary seeding.
    - Traffic areas, where construction or other traffic would prevent seed sprouting or vegetation growth. Consider using soil binders instead (see BMP 4-05).

BMP 4-04 HYDROSEEDING

- Avoid using hydroseeding during dry weather periods, unless supplemental irrigation is used.

INSTALLATION

- When feasible roughen embankment and fill areas with a crimping or punching type roller or by track walking prior to application.
- Avoid mulch over-spray onto the traveled way, sidewalks, lined drainage channels, and existing vegetation.
- Avoid use of mulch without a tackifier component, especially on slopes.
- Mixed hydraulic mulches and seed can be applied from a tower sprayed on top of a hydroseeder or by extending a hose and nozzle to adjacent areas.
- Seed should be delivered to the site sealed and clearly marked as to the species, purity, percent germination, dealer's guarantee, dates of test, and amount of Pure live Seed contained. Field confirmation should be made with the project environmental team.
- Apply hydraulic mulch and seed from multiple directions to adequately cover soil. Application from a single direction can result in shadowing, uneven coverage, patchy germination, and BMP failures.

MAINTENANCE

- All seeded areas shall be inspected for failures and re-seeded, fertilized, and

mulched within the planting season, using not less than half the original application rates. Any temporary re-vegetation effort that does not provide adequate cover must be re-vegetated.

- After any rainfall event, maintain all slopes to prevent erosion.

BMP 4-05 SOIL BINDERS

DESCRIPTION

Soil Binders is a procedural BMP for applying soil binder material to the soil surface to temporarily prevent water-induced erosion of exposed soils on construction or applicable operations and maintenance sites. Soil binders bind with the soil, creating a crust that sheds water and prevents the water erosion. Soil binders also provide temporary dust, wind, and soil stabilization benefits.

APPLICABILITY

For use on disturbed soils that require short-term temporary protection.

DESIGN

Selection of soil binders should be approved by project environmental after an evaluation of site-specific factors. Chemical soil binders must be on the SDG&E List of Approved Products. These approved soil binder products have low or no toxicity to aquatic organisms and wildlife. Follow manufacturer's recommendations for application procedures and cleaning of equipment after use. Any onsite cleaning must use appropriate BMPs (BMP 2-02 "Material Use", 2-03 "Spill Control", 2-04 "Solid Waste Management", 2-08 "Liquid Waste/Drilling Fluid Management", and 3-03 "Vehicle and Equipment Washing").

LIMITATIONS

- Soil binders may not penetrate areas where soil surfaces are made up primarily of silt and clay, particularly when compacted.

- Soil binders may not hold up well in areas of heavy pedestrian or medium to heavy vehicular traffic.
- Soil binders should not be applied during or immediately before rain events. Soil binders must be applied no less than 24 hours before rain to cure and dry and become fully effective.
- May not cure when low temperatures within 24 hours of application.
- Soil binders may experience spot failures during heavy rain and may require reapplication.
- Certain soil binders may not perform well during periods of low relative humidity.
- Should not be applied to frozen soil,

BMP 4-05 SOIL BINDERS

areas with standing water, under freezing conditions, or when the temperature may fall below 40 degrees Fahrenheit during the cure period.

INSTALLATION

- Prior to application, roughen embankment and fill areas.
- Crown or slope ground to avoid ponding.
- Uniformly pre-wet ground according to manufacturer's recommendations.
- Apply solution under pressure, overlapping application by 6 to 12 inches.
- Allow treated area to cure for the time recommended by the manufacturer, typically at least 24 hours.

Reapplication

- Apply second treatment before first becomes ineffective, using a 50% application rate.
- In low humidity applications, reactivate existing chemicals be rewetting according to manufacturer's recommendations.

MAINTENANCE

- Perform routine inspections on BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs or slope maintenance related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Reapplication of soil binders may be needed following rain events.

BMP 4-06 MULCH

DESCRIPTION

Wood mulching consists of applying a mixture of shredded wood mulch or bark to disturbed soils.

APPLICABILITY

Wood mulching is suitable for disturbed soil areas requiring temporary protection until permanent stabilization is established. Wood mulch can also be used for purposes of final stabilization (i.e., landscaping and/or areas of pedestrian traffic)

DESIGN

Mulch application is best suited to flat areas or slopes of 5:1 or flatter.

Green Material

This type of mulch is produced by the recycling or vegetation trimming such as grass, shredded shrubs, and trees. Chipped brush from on-site vegetation clearing activities is preferred. This material may be used as temporary ground cover with or without seeding.

Shredded Wood

This type of material is suitable for ground cover in ornamental or revegetated planting and should be free of weeds.

LIMITATIONS

- Not suitable for slopes steeper than 3:1
- Not suitable for areas exposed to concentrated flows. If used for temporary

stabilization, may need to be removed prior to further earthwork.

INSTALLATION

Prior to application, after existing vegetation has been removed, roughen embankment and fill areas.

Avoid mulch placement unto roads, sidewalks, drainage channels, existing vegetation, etc.

Mulch can be applied by hand or pneumatic blower to the following depths:

Type	Depth
Green Material	>2 inch
Shredded Wood	2-3 inch

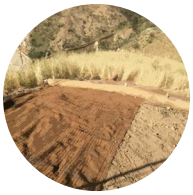
MAINTENANCE

- Perform routine inspections on BMPs weekly, prior to forecasted rain events, daily during extended rain events, and

BMP 4-06 MULCH

after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

- Areas where erosion is evident shall be repaired and BMPs reapplied as soon as possible.
- If mulch is applied as a stand-alone erosion control method over disturbed areas, it should last the length of time the site will remain barren or until final re-grading or revegetation. If mulch is applied to be the final cover (i.e., landscaping, etc.) mulch should be integral and bare earth should not be visible.



BMP 4-07 GEOTEXTILES AND MATS

DESCRIPTION

This Erosion Control and Soil Stabilization BMP is a procedural BMP for the installation of specific erosion control soil stabilization materials to control erosion from wind and water. These materials consist of:

- Geotextile blankets/mats,
- Plastic covers, and
- Rolled Erosion Control Products (RECPs) constructed of natural or man-made material.

Geotextiles are permeable fabrics typically made from polypropylene (plastic) or polyester that have the ability to protect the soil from erosion but are able to allow some water to reach and to drain the soil. Geotextile fabrics come in three basic forms: woven, needle punched, or heat bonded. Geotextiles also allow controlled rate and filtered drainage from a slope for slope moisture control, while providing slope reinforcement and protection.

Plastic covers, such as Visqueen, are essentially impermeable and are used for immediate, temporary protection.

Erosion control blankets/mats are meant to protect exposed soil from wind and rain impact erosion and reduce the speed at which water moves across the soil surface. These blankets can be made out of straw, coconut fiber, jute, other natural materials, and polypropylene. Permeability varies according to material and material weave.

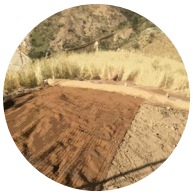
APPLICABILITY

Plastic Covers

For use as a stockpile cover or for small graded slopes in need of immediate protection

Erosion Control Blankets/ Mats

- Steep slopes, generally steeper than 1:3
- Slopes where the erosion hazard is high.
- Slopes and disturbed soils where mulches would need to be anchored.
- Disturbed areas where plants are slow to develop adequate protective cover.
- Channels with high flows.
- Channels intended to be vegetated.
- Slopes adjacent to water bodies or ESAs.



BMP 4-07 GEOTEXTILES AND MATS

IMPLEMENTATION

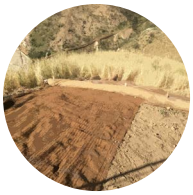
Erosion Control Blankets/Mats

Biodegradable RECPs are typically composed of jute fibers, curled wood fibers, straw, coconut fiber, or a combination of these materials. They do not contain any non-biodegradable materials.

Site must be prepared prior to application of RECPs.

- Full soil contact with the RECP must be made
- Rocks, clods, or other obstructions must be removed to ensure complete direct contact with soil.
- If applying seeds or utilizing RECPs in conjunction with vegetation establishment, seedbed should be prepared by loosening the top 2 to inches of topsoil.
- Seed the area before blanket installation for erosion control and vegetation. Seeding after mat installation is often specified for turf reinforcement. When seeding prior to blanket installation, all check slots and other areas disturbed during installation must be re-seeded. Where soil filling is specified, seed the matting and the entire disturbed area after installation and prior to filling the mat with soil.
- U-shaped wire staples, metal geotextile stake pins, or triangular wooden stakes can be used to anchor mats and blankets to the ground surface.

- Wire staples and metal stakes should be driven flush to the soil surface.
- All anchors should be 6-inches to 18-inches long and have sufficient ground penetration to resist pullout. Longer anchors may be required for loose soils.
- Installation on slopes – Consult the manufacturer's recommendations for installation. In general, these will be as follows:
    - Begin at the top of the slope and anchor the blanket in a 6-inch deep by 6-inch-wide trench. Backfill trench and tamp earth firmly.
    - Unroll blanket down slope in the direction of water flow.
    - Overlap the edges of adjacent parallel rolls 2 inches to 3 inches and staple every 3 feet.



BMP 4-07 GEOTEXTILES AND MATS

- When blankets must be spliced, place blankets end over end (shingle style) with a 6-inch overlap. Staple through overlapped area, approximately 12 inches apart.
- Lay blankets loosely and maintain direct contact with the soil. Do not stretch.
- Staple blankets sufficiently to anchor blanket and maintain contact with the soil. Staples shall be placed down the center and staggered with the staples placed along the edges.

- Blankets and mats must be removed and disposed of prior to application of permanent soil stabilization measures.

Plastic Covers

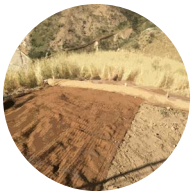
- If used as temporary slope protection:
  - Minimum 6 mil thickness and keyed into top of slope and held in place with sandbags placed no more than 10 feet apart. Seams should be weighted down the entire length with an overlap of at least 12 inches. Edges should be imbedded at least 6 inches into oil.
- As a stockpile cover, see BMP 1-08 (Stockpile Management)

LIMITATIONS

- RECPs can delay seed germination due to reduction in soil temperature and/or sunlight.
- RECPs are not typically suitable for rocky sites or in areas where final vegetation will be mowed.
- Use of plastic sheeting or RECPs containing non-biodegradable materials should be limited. If used, plastic should be rated to withstand photo degradation.

MAINTENANCE

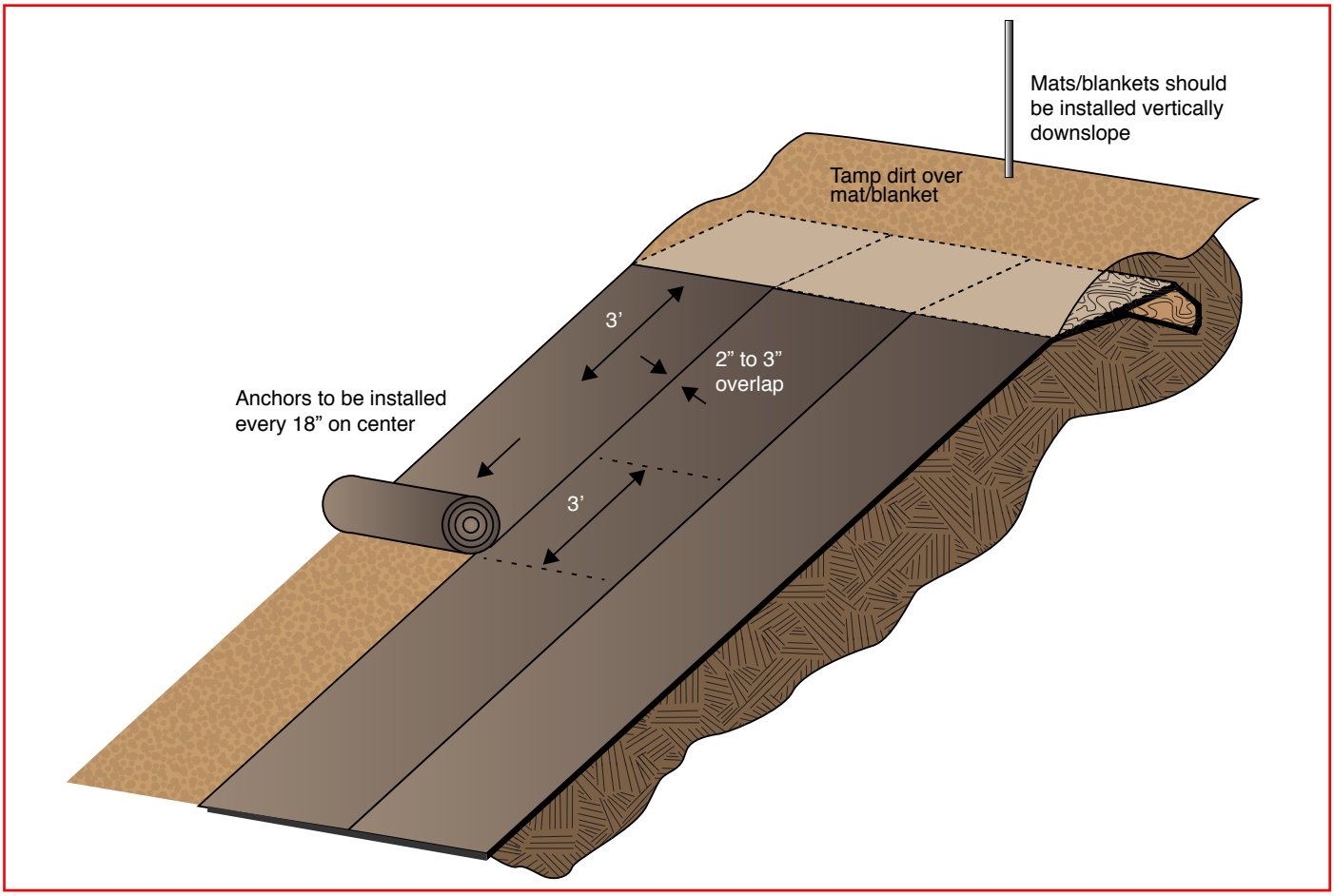
- Areas covered with temporary soil stabilization should be inspected routinely and before and after significant



BMP 4-07 GEOTEXTILES AND MATS

forecasted storm events. Any failures should be repaired immediately. Areas covered with temporary soil stabilization should be maintained to provide adequate erosion control. Temporary soil stabilization should be reapplied or replaced on exposed soils when greater than 10 percent of the previously covered area becomes exposed or exhibits visible erosion.

- Ensure that matting is in uniform contact with soil and that staples are flush with the ground.
- If washout or breakage occurs, re-install the material after repairing the damage to the slope or channel.



BMP 4-08 DUST CONTROL

DESCRIPTION

Dust control is a procedural BMP that consists of applying water or other dust suppressant to prevent or alleviate dust nuisance generated by construction, and operations and maintenance activities.

APPLICABILITY

All construction sites where exposed soil is susceptible to wind erosion.

DESIGN

- Appropriate methods of applying dust control (water, chemical dust suppressant, or synthetic covers and the means to apply it) should be available for construction sites with the potential to create dust.
- Dust control methods should be approved by project environmental lead. A construction permit or an agency rule may require specific control procedures.
- Obtain prior approval to use any chemical dust suppressant from project environmental lead. Dust suppressant chemicals must be on SDG&E / SoCalGas approved product list.
- Non-potable water should not be conveyed in tanks or drainpipes that will be used to convey potable water, and there should be no connection between potable and non-potable supplies. Non-potable tanks, pipes and other conveyances should be marked "NON-POTABLE WATER – DO NOT DRINK."

Approval for use of all non-potable sources of water must be obtained from environmental.

- If reclaimed wastewater is used for dust control, the sources and discharge must meet California Department of Health Services water reclamation criteria and RWQCB requirements. Approval for use of reclaimed wastewater must be obtained from project environmental lead.

LIMITATIONS

- Dust control must be implemented in accordance with local air quality requirements.
- Watering only prevents dust for a short period of time and may need to be applied often to retain effectiveness.
- Overwatering may cause erosion, mud, and trackout.

BMP 4-08 DUST CONTROL

INSTALLATION

Water applied for dust control should be applied evenly and in a manner that does not generate runoff or ponding.

MAINTENANCE

- Check areas protected to ensure coverage.
- Reapply water, chemical dust suppressants, or maintain soil covers as necessary to maintain their effectiveness.

BMP 4-09 DIVERSION BERMS AND DRAINAGE SWALES

DESCRIPTION

A diversion berm is a temporary mound of compacted soil used to direct runoff water to a desired location. A drainage swale is a shaped and sloped soil depression used to convey runoff to a desired location. Diversion berms and drainage swales divert off site runoff around the construction or operation and maintenance site, divert runoff from flowing onto stabilized or disturbed areas, and direct runoff into sediment basins or traps. A diversion berm or swale itself does not control erosion or remove or trap sediment from runoff.

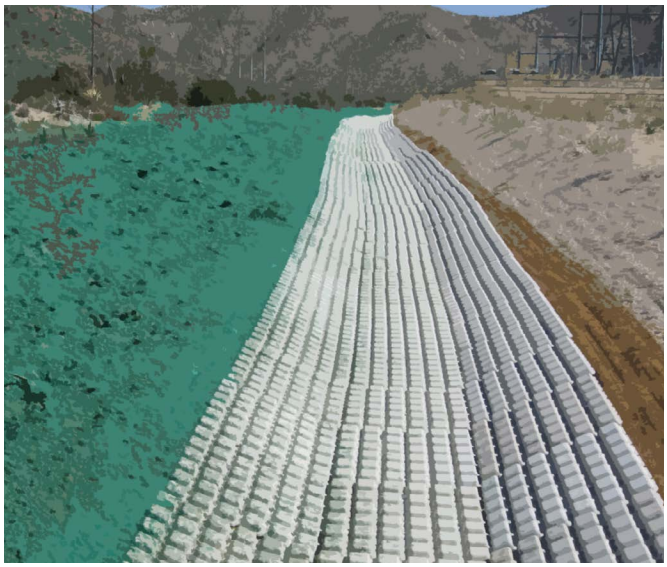
APPLICABILITY

Diversion berms and drainage swales are suitable for use, individually or together, where runoff needs to be diverted from one area to another. These BMPs may be used:

- To direct runoff away from disturbed areas or at the top of slopes.
- To convey surface runoff down sloping land.
- To divert runoff towards a stabilized watercourse, drainage pipe, or channel.
- To intercept runoff from paved surfaces.
- To divert sediment laden runoff into sediment basins or traps.

DESIGN

Diversion berms and drainage swales should be considered:



- At the top of slopes to divert run-on from adjacent or undisturbed slopes.
- At bottom and mid-slopes to intercept sheet flow and convey concentrated flows.
- Below steep grades where runoff begins to concentrate.
- Along roadways and facility improvements subject to flood drainage.
- Berms should not be used for drainage areas greater than 10 acres or along slopes greater than 10 percent. For larger drainage areas, more permanent drainage structures should be built in accordance with local requirements.
- Drainage areas more than 5 acres should not drain to a temporary drainage swale. For larger drainage areas, use berms, or more permanent drainage structures should be built in accordance with local requirements.

BMP 4-09 DIVERSION BERMS AND DRAINAGE SWALES

LIMITATIONS

- Diversion berms may create disturbed areas and become construction equipment barriers.
- Diversion berms must be stabilized immediately, adding cost and maintenance.
- Diverted storm water may cause downstream flood damage.
- Berms should not be constructed of easily eroded soils.
- Regrading the site to remove the berm may add cost.
- Other soil stabilization and sediment controls such as check dams, plastics, and blankets may be needed to prevent erosion in newly graded berms and swales.
- Sediment accumulation, scour depression, and/or persistent non-storm water discharges can result in standing water suitable for mosquito production.
- Must correctly size and locate berms and drainage swales.
- Conveyances and outlets should be stabilized.
- Size to control flow velocity based on evaluation of the erosion risk, soil types, overtopping, flow backups, washout, and site drainage flow patterns.

- Install permanent berms and swales early in the construction process.

DRAINAGE SWALES

Standard engineering design criteria for small open channel and closed conveyance systems should be used. Unless local drainage design criteria state otherwise, drainage swales should be designed as follows:

- Place drainage swales above or below, not on, a cut or fill slope.
- Swale bottom width should be at least 2 feet, and the depth of the swale should be at least 18 inches. The swale side slopes should be 1:2 (vertical: horizontal) or flatter.
- Drainage swales should be at a grade of at least 1 percent, but not more than 15 percent.
- The swale must not be overtopped by the peak discharge from a 10-year storm, irrespective of the design criteria above.

BMP 4-09 DIVERSION BERMS AND DRAINAGE SWALES

- If intended to be a permanent feature, must be designed by a California registered engineer.

INSTALLATION

Diversion Berms:

- Compact all berms and provide positive drainage to an outlet.
- All berms should have 1:2 or flatter side slopes, and minimum 18-inch height, and minimum 24-inch top width. Wide top widths and flat slopes are usually needed for construction traffic crossings.
- Runoff should be conveyed to a sediment trapping device when the berm channel or the drainage area above the berm are not adequately stabilized.
- Temporary stabilization may be achieved using seed and mulching for slopes less than 5 percent and either riprap or sod for slopes greater than 5 percent. Stabilization should be completed immediately after installation/placement.
- If riprap is used to stabilize the channel formed along the toe of the berm, the following typical specifications apply:

Channel Grade	Riprap Stabilization
0.5-1%	4-inch rock
1.1-2.0%	6-inch rock
2.1-4.0%	8-inch rock
4.1-5.0%	8–12-inch riprap

- The riprap, recycled concrete, etc. should be pressed into the soil with construction equipment.

- Filter fabric may be used to cover berms in use for long periods.
- Construction activity on the earthen berms should be kept to a minimum.

Drainage Swales:

- Stabilize all swales immediately after installation/placement. Seed and mulch swales with slopes of less than 5 percent and use riprap or sod for swales with slopes between 5 and 15 percent. For temporary swales, geotextiles and mats may provide immediate stabilization.
- Irrigation may be required to establish sufficient vegetation to prevent erosion.
- Do not operate vehicles across a swale unless a stabilized crossing is provided.
- At a minimum, the drainage swale should conform to predevelopment drainage patterns and capacities.

BMP 4-09 DIVERSION BERMS AND DRAINAGE SWALES

- Construct the drainage swale with a positive grade to a stabilized outlet.
- Provide erosion protection or energy dissipation measures if the flow out of the drainage swale can reach erosive velocity.

MAINTENANCE

- Perform routine inspections on any berms or swales weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Inspect BMPs subject to non-storm water discharges daily while the discharges occur.
- Inspect ditches and berms for washouts and erosion. Repair riprap, damaged linings, or soil stabilizers, and linings as needed.
- Inspect channel linings, embankments, and beds of swales and berms for erosion and accumulation of debris and sediment. Remove accumulated debris and sediment as needed. Removed sediment shall be incorporated in the project at appropriate locations or disposed of in accordance with federal, state and local requirements.
- Temporary conveyances should be completely removed as soon as the surrounding drainage area has stabilized or at the completion of construction.

BMP 4-10 VELOCITY DISSIPATION DEVICES

DESCRIPTION

Velocity dissipation devices are composed of rock, riprap, grouted riprap or concrete rubble. Velocity dissipation devices shall be placed at the outlet of a pipe, channel, or waterbar to prevent scour and erosion caused by concentrated high velocity flows. There are many types of velocity dissipation devices.

APPLICABILITY

Velocity dissipation devices are suitable when discharge velocities and energies at the outlets of culverts, conduits, waterbars, or channels are sufficient to erode the next downstream reach. Applicable:

- At outlets of pipes, drains, culverts, slope drains, diversion ditches, swales, conduits, channels, waterbars, etc.
- At outlets located at the bottom of mild to steep slopes.
- At discharge outlets that carry continuous water flow.
- At outlets subject to short, intense water flows, such as flash floods.
- At points where lined conveyances discharge to unlined conveyances.

DESIGN

Depth of flow, roughness, gradient, side slopes, discharge rate, and velocity should be considered in the outlet design. Compliance to local and state regulations should be considered, particularly while working in environmentally sensitive streambeds.

- Determine the apron length and rock size gradation using the discharge pipe diameter and estimated discharge rate. Select the longest apron length and largest rock size suggested by the pipe size and discharge rate. Recommendations for rock size and length of outlet protection mat should be considered minimums. Use sound, durable, and angular rock.
- Where flows are conveyed in open channels such as ditches or swales, use the estimated discharge rate for selecting the apron length and rock size. Flows should be the same as the culvert or channel design flow but never less than the pear 5-year flow for temporary structures planned for one rainy season, or the 10-year peak flow for temporary structures planned for two or three rainy seasons.
- Install filter fabric, riprap, grouted riprap, or concrete apron at selected outlet. Install filter fabric or well-graded filter layer beneath the riprap apron. Riprap aprons

BMP 4-10 VELOCITY DISSIPATION DEVICES

are best suited for temporary use during construction. Grouted or wired riprap can minimize maintenance.

- Rock outlet protection is easier to install than concrete aprons or energy dissipaters, and serves to trap sediment and reduce flow velocities.

LIMITATIONS

- Large storms or high flows can wash away the outlet protection and leave the area susceptible to erosion.
- Sediment captured by the outlet protection may be difficult to remove without removing the protection.
- Outlet protection may negatively impact the channel habitat.
- Grouted riprap may break up in areas of freeze and thaw.
- With inadequate drainage, water may build up behind and break grouted riprap.
- Sediment accumulation, scour depression, and/or persistent non-storm water discharges can result in standing water suitable for mosquito production.

INSTALLATION

- Carefully place riprap to avoid damaging the underlying filter fabric.
- Rock 4 to 6-inches may be carefully dumped onto the filter fabric from a maximum height of 12 inches.

- 8- to 12-inch rock must be hand placed onto filter fabric, or the filter fabric may be covered with 4 inches of gravel, and the rock may be dumped from a maximum height of 16 inches.
- Rock greater than 12 inches shall only be dumped onto filter fabric protected with a layer of gravel with a thickness equal to one-half the D50 rock size, with the dump height limited to twice the gravel protection layer thickness.
- Align apron with receiving stream and keep straight throughout its length. If a curve is needed to fit site conditions, place it in the upper section of the apron.
- Outlets on slopes steeper than 10 percent should have additional protection.

MAINTENANCE

- Perform routine inspections on velocity dissipation devices weekly, prior to

BMP 4-10 VELOCITY DISSIPATION DEVICES

forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.

- Inspect BMPs subject to non-storm water discharges daily while the discharges occur. Minimize standing water by removing sediment blockages and filling depressions.
- Inspect apron for displacement of the riprap and damage to the underlying fabric. Repair fabric and replace riprap that has washed away. If riprap continues to wash away, consider using larger material.
- Inspect for scour beneath the riprap and around the outlet. Repair damage to slopes or underlying filter fabric immediately.
- Temporary devices should be completely removed as soon as the surrounding drainage area has been stabilized or at the completion of construction.

BMP 4-11 SLOPE DRAINS

DESCRIPTION

A slope drain is a pipe used to intercept and direct surface runoff or groundwater into a stabilized watercourse, trapping device, or stabilized area. Slope drains are typically used with diversion berms and drainage ditches to intercept and direct surface flow away from slope areas to protect cut or fill slopes. Slope drains prevent storm water from flowing directly down the slope by confining the runoff into an enclosed pipe or channel. The slope drain may be installed as a rigid pipe, such as corrugated metal, a flexible conduit, or a lined terrace drain with a top of a slope inlet and a bottom of a slope outlet.

APPLICABILITY

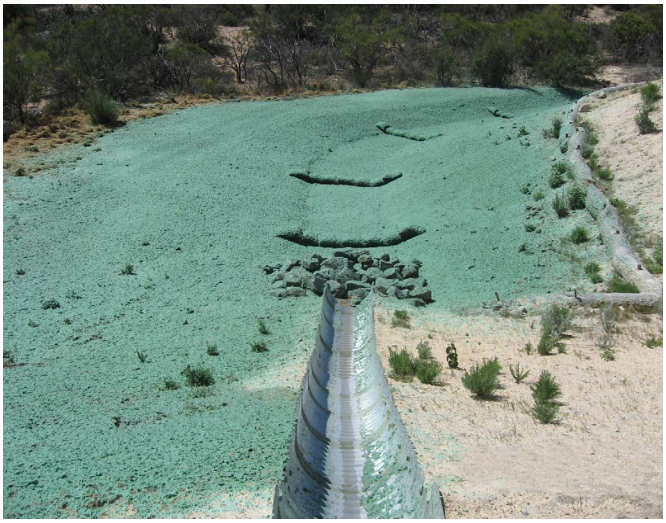
For use where:

- Concentrated runoff must be conveyed down a slope.
- Drainage is needed for top of cut and fill slopes where water can accumulate.
- An emergency spillway is required for a sediment basin.

DESIGN

Slope drains should be considered where:

- The drainage area is less than 10 acres per slope drain. For larger areas, use a rock-lined channel, or subdivide into areas of 10 acres or less, with each area is treated as a separate drainage.
- Drainage areas exceeding 10 acres must be designed by a California Registered



Civil Engineer and approved by the agency that issued the grading permit.

- Permanent structures included in the project plans can often serve as construction BMPs if implemented early. However, the permanent structure must meet or exceed the criteria for the temporary structure.
- Slope drains and inlets must be securely attached to the slope and must be adequately sized to carry the capacity of the design storm and associated forces.
- Outlets must be stabilized with riprap, concrete, or other type of energy dissipater, or directed into a stable sediment trap or basin.
- Debris racks are recommended at the inlet. Debris racks are barriers used to collect debris that is too large to pass through the inlet. Debris racks located several feet upstream of the inlet can usually be larger than racks at the inlet, and thus provide enhanced debris protection and less plugging.

BMP 4-11 SLOPE DRAINS

- Safety racks are also recommended at the inlet and outlet of pipes to prevent a human body or animal from washing into the pipe and/or becoming trapped.
- Size to convey at least the peak flow of a 10-year storm. The design storm is conservative due to the potential impact of system failures. The pipe size may be computed using the Rational Method or a method established by a local municipality. Higher flows must be safely stored or routed to prevent any offsite concentration of flow or erosion. Maximum slope is generally limited to 1:2 as energy dissipation below steeper slopes is difficult.
- Direct surface runoff to slope drains with interceptor dikes. Top of interceptor dikes should be 12 inches higher than the top of the slope drain.
- Slope drains can be placed on or buried beneath the slope surface.
- As a guide, temporary slope drains should not be sized smaller than shown in the following table:

Minimum Pipe Diameter (inches)	Maximum Drainage Area (Acres)
12	1.0
18	3.0
21	5.0
24	7.0
30	10.0

- Recommended materials include metal, plastic, or concrete pipe, either corrugated or smooth wall. The following types of slope drains are common:

Rigid Pipe:

- Also known as a pipe drop, the pipe usually consists of corrugated metal pipe or rigid plastic pipe. The pipe is placed on undisturbed or compacted soil and secured to the slope surface or buried in a trench. Concrete thrust blocks must be used when warranted by the calculated thrust forces. Collars should be properly installed and secured with metal straps or watertight collars.

Flexible Pipe:

- The pipe consists of a flexible tube of heavy-duty plastic, rubber, or composite material. The tube material is securely anchored to the slope surface. The tube should be securely fastened to the metal inlet and outlet conduit sections with metal straps or watertight collars.

Section Downdrains:

- The section downdrain consists of a prefabricated, section conduit of half round or third round material, and performs similar to a flume or chute. The pipe must be placed on undisturbed or compacted soil and secured into the slope.

Concrete-Lined Terrace Drain:

- This concrete channel drains water from a slope terrace to the next level. These drains are typically specified as permanent structures and should be

BMP 4-11 SLOPE DRAINS

designed according to local criteria. If installed early, they can be construction slope drains.

LIMITATIONS

- The drainage area is less than 10 acres per slope drain. For larger areas, use a rock-lined channel or paved chutes.
- Drainage areas exceeding 10 acres must be designed by a California Registered Civil Engineer and approved by the agency that issued the grading permit.
- Severe erosion may result when slope drains fail by overtopping, piping, or pipe separation which can be caused by debris clogs or undersizing.

INSTALLATION

When installing slope drains:

- Install perpendicular to slope contours.
- Compact soil around and under entrance, outlet, and along length of pipe.
- Securely anchor and stabilize pipe appurtenances into soil.
- Check to ensure that pipe connections are watertight.
- Protect areas around inlet with filter fabric. A flared end section installed at the inlet will improve flow into the slope drain and prevent erosion at the pipe entrance. Use a flared section with a 6-inch minimum toe plate to help prevent undercutting. The flared section should slope towards the pipe inlet.

- Protect outlet with riprap or other energy dissipation device. Protect outlet of slope drains using a flared end section when outlet discharges to a flexible energy dissipation device.

MAINTENANCE

- Perform routine inspections on slope drains weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Inspect BMPs subject to non-storm water discharges daily while the discharges occur. Minimize standing water by removing sediment blockages and filling depressions.

BMP 4-11 SLOPE DRAINS

- Inspect outlet for erosion and downstream scour. If eroded, repair damage and install additional energy dissipation measures. If downstream scour is occurring, it may be necessary to reduce flows being discharged into the channel unless other preventative measures are implemented.
- Insert inlet for clogging or undercutting. Remove debris from inlet to maintain flows. Repair undercutting at inlet, and if needed, install flared section or riprap around the inlet to prevent further undercutting.
- Inspect pipes for leakage. Repair leaks and restore damaged slopes.
- Inspect slope drainage for accumulations of debris and sediment. Remove sediment from entrances and outlets as required. Flush drains as necessary; capture and settle out sediment from discharge.
- Ensure water is not ponding onto inappropriate areas (e.g., active traffic lanes, material storage areas, etc.).
- Pipe anchors must be checked to ensure that the pipe remains anchored to the slope. Install additional anchors if pipe movement is detected.

BMP 4-12 STREAMBANK STABILIZATION

DESCRIPTION

Streambank stabilization includes measures to reduce the discharge of sediment from streambanks with exposed or disturbed soil, or unstable banks. Streambank stabilization measures include preservation of existing vegetation, hydraulic mulch, hydroseeding, soil binders, straw mulch, geotextiles and mats, berms, and drainage swales, velocity dissipation devices, and slope drains. Streambank sediment controls include silt fences, fiber rolls, gravel bag berms, rock filters, and K-rail barriers, and padding. Each of these measures have different applications, limitations, and maintenance requirements for use as streambank stabilization.

Stream channels, streambanks, and associated riparian areas are dynamic and sensitive ecosystems that respond to changes in land use. Streams on the 303(d) list and listed for sediment may require numerous measures to prevent any increases in sediment load to the stream.

APPLICABILITY

Streambank stabilization procedures apply to all construction projects and operations and maintenance activities that disturb or occur within stream channels and their associated riparian areas.

DESIGN

Projects should account for: scheduling; avoidance of wet in-stream construction; minimizing disturbance and construction

time period; selecting crossing location; and selecting equipment.

- Construction and operation and maintenance activities should be scheduled according to the relative sensitivity of the environmental concerns and will be different when working near perennial streams vs. ephemeral streams.
- Minimize disturbance by using pre-disturbed areas, selecting the narrowest crossing location, limiting vehicle crossing trips, and minimizing the number and size of work areas. Plan work areas at least 50 feet from the stream channel.
- Avoid steep and unstable banks, highly erodible or saturated soils, or highly fractured rock.
- Select a project or work site that minimizes disturbance to aquatic species or habitat.
- Select equipment that reduces the amount of pressure exerted on the ground surface (less than 5 or 6 pounds per square inch where possible.

BMP 4-12 STREAMBANK STABILIZATION

LIMITATIONS

Specific permit requirements or mitigation measures such as RWQCB 401 Certification, U.S. Army Corps of Engineers 404 Permit, and Section 1600 of the California Department of Fish & Game supersede the guidance in this BMP.

If numerical water quality standards are mentioned in any of these and other related permits, testing and sampling may be required. Soil disturbance activities in watersheds having streams listed as 303(d) impaired for sediment, silt, or turbidity, may require sampling to verify that there is no net increase in sediment load along with other TMDL requirements.

MAINTENANCE

- Perform routine inspections on streambank stabilization BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Inspect and repair equipment as needed (i.e., damaged hoses, fitting, and gaskets)
- Inspect BMPs subject to non-stormwater discharges daily while discharges occur.

BMP 4-13 SOIL PREPARATION

DESCRIPTION

Soil preparation/roughening involves assessment and preparation of surface soils for BMP installation and final stabilization. This includes soil testing (for seed base, soil characteristics, or nutrients), or roughening surface soils by mechanical methods (including sheepsfoot rolling, track walking, scarifying, stair stepping, and imprinting) to prepare soils for additional BMPs or to break up sheet flow. Soil preparation can also involve tilling topsoil to prepare a seed bed and/or incorporation of soil amendments to enhance vegetative establishment. Various roughening techniques on slopes can result in a significant erosion reduction as compared to smooth slopes.

APPLICABILITY

Soil Preparation: Applicable to areas that will need vegetative establishment and is used in conjunction with other soil stabilization methods (i.e., RECPs, sod placement, etc.); it is not the same as roughening and typically includes tasks such as tilling, raking, and soil amendments.

Roughening: Applicable for sites that have adjunct BMPs to control erosion onsite (i.e., perimeter controls, vegetation establishment, etc.) along any disturbed slopes or compacted soils ahead of stabilization measures.

LIMITATIONS

- Preparation and roughening must take place prior to installing other erosion controls or sediment controls on slope faces.
- Consideration must be given to erosion BMPs that may follow soil preparation. As some BMPs should not be installed over certain categories of soil preparation.

INSTALLATION

Minimal materials are required unless amendments and/or seed are added to the soil. Most soil roughening and preparation can be done with standard tracked earthwork construction equipment.

Soil Preparation

Soil preparation for seeding can be accomplice by disking or scarifying the surface to eliminate crust. If soil testing is

BMP 4-13 SOIL PREPARATION

conducted, additional soil amendments may be added (see BMP 4-04 Hydroseeding).

Cut-Slope Roughening

- Stair-step grade or groove the cut slopes steeper than 3:1.
- Use stair-step grading on any erodible material soft enough to be ripped with a bulldozer. Slopes consisting of soft rock with some subsoils are well suited to stair-step grading.
- Make the vertical cut distance less than the horizontal distance, and slightly slope the horizontal position of the "step" in toward the vertical wall.
- Do not make individual vertical cuts more than 2 feet or 3 feet high in soft or rock materials, respectively.
- Groove the slope using machinery to create a series of ridges and depressions that run across the slope on the contour.

Fill Slope Roughening

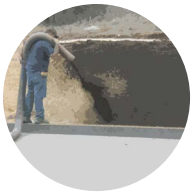
- Place on fill slopes with a gradient steeper than 3:1 in lifts not to exceed 8 inch., and make sure each lift is properly compacted.
- Ensure that the face of the slope consists of loose, uncompacted fill 4-6 inch deep.
- Use grooving or tracking to roughen the face of the slopes, if necessary.
- Do not blade or scrape the final slope face.

Roughening for Slopes that will be Mowed

- Slopes which require mowing should be flatter than 3:1.
- Roughen these areas to shallow grooves by track walking, scarifying, sheepsfoot rolling, or imprinting. Excessive roughness is undesirable when mowing is planned.
- Space grooves less than 10 inches apart, and not less than 1 inch deep, and perpendicular to the direction of runoff (parallel to the slope contours).

Roughening with Tracked Machinery

- Limit roughening with tracked machinery to soils with a sandy textural component to avoid undue compaction of the soil surface.



BMP 4-14 COMPOST BLANKET

DESCRIPTION

A compost blanket is a layer of compost that is applied to slopes and disturbed areas as an erosion control measure. It can also be utilized to establish vegetation or increase stormwater infiltration.

APPLICABILITY

Suitable as an erosion control measure for:

- Rough graded areas that will remain inactive for longer than 14 days.
- As a cover for soil stockpiles
- Slopes with exposed soil and partial vegetation (i.e., trees and shrubs)
- Disturbed areas

For use on slopes of 2:1 or less.

DESIGN

Compost should meet the following specifications for quality, per the Caltrans Standard Special Provision 10-1, Erosion Control (Compost Blanket).

LIMITATIONS

- Compost can potentially leach nutrients (phosphorus and nitrogen) into runoff and potentially impact water quality. Compost should not be used upstream of impacted waterbodies.
- Compost quality is highly variable.
- Compost blankets should not be applied in areas of concentrated flows.

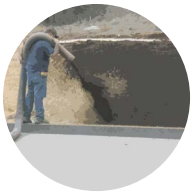
INSTALLATION

Compost should be applied to an even depth across surfaces. Suggested depth:

Depth	Durability
<1 inch	< 6 months
2 inch	6-12 months
>3 inches	12-18 months

MAINTENANCE

- Perform routine inspections on BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- In areas where erosion is evident, another layer of compost should be applied. Additional BMPs may need to be applied to reduce run-on impacts.
- Limit foot traffic to minimize damage.



BMP 4-14 COMPOST BLANKET

- Operate tracked machinery up and down the slope to leave horizontal depressions in the soil. Do not back-blade during the final grading operation.
- Seed and mulch roughened areas as soon as possible to obtain optimum seed germination and growth.

MAINTENANCE

- Perform routine inspections on installed BMPs weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events. Initiate repairs related to a storm event within 72 hours of identifying the problem or as soon as feasible but prior to the next forecast precipitation event, per the CGP for SWPPP projects.
- Check seeded slopes for signs or erosion (i.e., rills and gullies). Fill those areas slightly above grade, then reseed as soon as possible.

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3.11 HYDROLOGY AND WATER QUALITY

This section describes the existing conditions for hydrology and water quality in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.11.1 Environmental Setting

3.11.1.1 Regional Hydrologic Setting

The Proposed Project would be located within San Diego County. The county is divided into the following two hydrologic regions:

- the Colorado River Hydrologic Region, which drains in an easterly direction into the Salton Sea; and
- the South Coast Hydrologic Region, which drains in a westerly direction toward the Pacific Ocean and encompasses most of the county, parts of southwestern Riverside County, and southwestern Orange County.

The Peninsular Mountain Range generally forms the divide between these two hydrologic regions. The Proposed Project would be located entirely within the South Coast Hydrologic Region. While surface water can drain through the county's watersheds,[1] the arid and semi-arid climates mean this surface water is often also infiltrated into the subsurface-saturated zone to become groundwater and a source of recharge for groundwater aquifers (including both fractured rock aquifers and unconfined alluvial basin aquifers). Aquifers are recharged at varying rates depending on a number of factors, but primarily the amount and frequency of rainfall and the hydraulic conductivity of the underlying soil and rock.

The climate in the region of the Proposed Project is semi-arid with an average annual rainfall of approximately 16 inches. The summers are hot and dry, and the winters are relatively cool and wet. The average annual temperature is 62.5 degrees Fahrenheit (°F), with an average maximum and minimum of 74.6°F and 50.6°F, respectively (National Oceanic and Atmospheric Administration [NOAA] 2025).

The Proposed Project would be located within the boundary of the San Diego Regional Water Quality Control Board's (RWQCB's) jurisdiction and is regulated by the Water Quality Control Plan for the San Diego Basin (Basin Plan). The Basin Plan contains the water quality objectives, policies, regulations, and implementation programs for the protection of surface water and groundwater within the RWQCB's jurisdiction. The Basin Plan describes the beneficial uses that each waterbody supports and the basis for the RWQCB's regulatory actions. Examples of beneficial uses include drinking water supply, recreation, fishing, and protection of aquatic life.

[1] The term "watershed" is defined as an area or region drained by a river, river system, or other body of water.

Water quality status and issues within the Proposed Project Area are further discussed in Section 3.11.1.2 Local Hydrology.

3.11.1.2 Local Hydrology

As depicted in Figure 3.11-1: Watershed Map, the Proposed Project would lie within the following three separate watersheds:

- the Lower San Diego River Watershed at the eastern end of the proposed 230 kV western underground (UG) segment, approximately 2 miles from La Cresta Boulevard westward to the terminus at Vista De Montemar;

- the Lower and Upper Sweetwater River Watershed, which encompasses the remaining approximately 0.91 mile of the proposed 230 kV western UG segment east of La Cresta Boulevard, the entirety of the proposed 230 kV overhead (OH) segment, the entirety of the proposed 230 kV eastern UG segment, and the existing Suncrest Substation; and

- the Upper Cottonwood Creek Watershed portion of the Tijuana River Hydrologic Area, which encompasses the proposed Swat Staging Yard and the proposed Lyons Valley Staging/Fly Yard.

3.11.1.2.1 San Diego River Watershed

The San Diego River Watershed encompasses a land area of approximately 434 square miles, making it the second-largest watershed in the county (Project Clean Water 2025). This watershed lies in the central portion of the county and neighbors the Los Peñasquitos and San Dieguito River watersheds to the north and the Sweetwater River Watershed. Rainfall within this watershed primarily drains through the San Diego River, which stretches east to west over approximately 52 miles and originates near Santa Ysabel in the Cuyamaca Mountains. The river eventually discharges to the Pacific Ocean near the neighborhood of Ocean Beach (Project Clean Water 2025).

As the most populous watershed in the county, the San Diego River Watershed is estimated to be home to approximately 520,000 residents, according to 2010 United States (U.S.) Census data. The vast majority of the population is concentrated in the more developed urban and suburban regions of the lower watershed, which bears a disproportionate share of the pollution burden when compared to portions of the watershed upstream. Given its dense population, the watershed suffers from several human-induced pollutants, which have the potential to negatively impact how residents, business owners, and tourists use and interact with local waterbodies (Project Clean Water 2025).

3.11.1.2.2 Sweetwater River Watershed

The Sweetwater River Watershed is one of three watersheds to make up the San Diego Bay basin, which contains approximately one-third of the county's population. The watershed contains three main hydrologic areas—Lower, Middle, and Upper Sweetwater—and encompasses over 145,000 acres of land (Project Clean Water 2025). The more densely populated Lower Sweetwater Hydrologic Area includes the Port of San Diego and the cities of San Diego, National City, Chula Vista, La Mesa, and Lemon Grove.

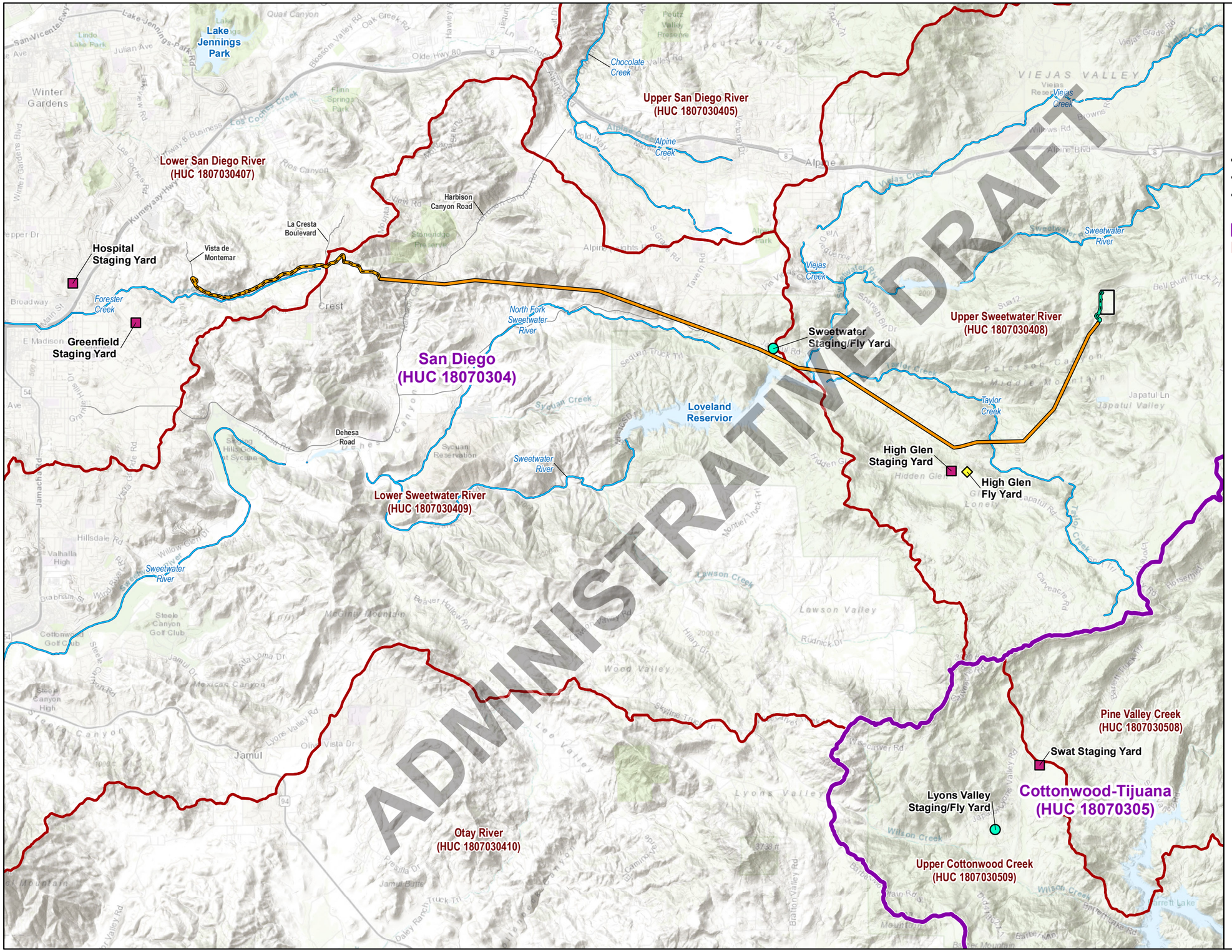


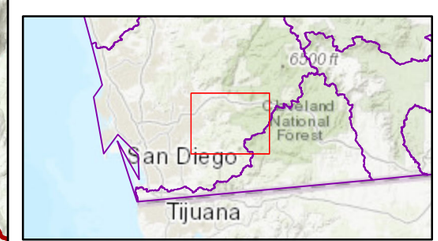
Figure 3.11-1:
Watershed Map

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- Subbasin (HUC 8)
- Watershed (HUC 10)

National Hydrography Dataset

- Stream



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The Middle and Upper Sweetwater Hydrologic Areas to the east (i.e., where the Proposed Project would be located) primarily consist of unincorporated areas within the jurisdiction of the County of San Diego (County).

The watershed has four major waterbodies—Sweetwater River, Sweetwater Reservoir, Loveland Reservoir, and San Diego Bay. Portions of the San Diego Bay National Wildlife Refuge are contained within the watershed and provide habitat to endangered and threatened species, such as California least tern and belted kingfisher. Farther upstream, much of the watershed is occupied by undeveloped lands in the Cleveland National Forest (CNF); Cuyamaca Rancho State Park; the unincorporated communities of Pine Valley, Descanso, and Alpine; and the Viejas Reservation (Project Clean Water 2025).

3.11.1.2.3 Tijuana River Watershed

The Tijuana River Watershed encompasses a region of approximately 1,750 square miles on both sides of the international U.S.-Mexico border. Due to the watershed's binational nature, water quality issues require significant coordination between agencies of both countries. The U.S. portion constitutes approximately 27 percent of the watershed and is the southernmost basin within the San Diego region, bordering the San Diego Bay basin to the north and Mexico to the south (Project Clean Water 2025).

Rainfall to the area primarily drains through the Tijuana River, which stretches approximately 120 miles and is sourced from two main tributaries—one originating in the Laguna Mountains in the U.S. and one originating above the Abelardo L. Rodriguez Dam in Mexico. Although only a relatively minor portion of the watershed area is within California, surface runoff in Mexico and the U.S. ends up in the Tijuana River and is eventually discharged to the Tijuana Estuary and Pacific Ocean on the U.S. side of the international border (Project Clean Water 2025).

The Tijuana River Watershed is estimated to be home to approximately 2,800,000 residents, and approximately 83,000 live on the U.S. side. The vast majority of the population is concentrated in the cities of Tijuana and Tecate, south of the international border. Due in part to the extensive development in the Mexican portion of the watershed, the Tijuana River and other discharge points suffer from several human-induced pollutants, which have the potential to negatively impact how residents, business-owners, and tourists use and interact with local waterbodies (Project Clean Water 2025).

3.11.1.3 Surface Waters

The main receiving waterbodies in the vicinity of the Proposed Project include the Harbison Canyon receiving waterbody, Sweetwater River (including the North Fork), Taylor Creek, Chocolate Creek, Viejas Creek, Alpine Creek, and Forester Creek. Rainfall in the proposed 230 kV eastern UG segment, the proposed 230 kV OH segment, and the existing Suncrest Substation would generally flow south and southwest toward Taylor Creek and the Sweetwater River, which drains to Sweetwater and Loveland reservoirs. Rainfall at the terminus of the proposed 230 kV western UG segment would most likely flow south and west toward Forester Creek, which eventually discharges to the San Diego River. The surface waters are depicted in Figure 3.11-1: Watershed Map.

3.11.1.3.1 Potentially Jurisdictional Aquatic Resources

Between April 2 and July 18, 2025, aquatic resource delineations were conducted in the Proposed Project Area. The survey area included a 150-foot buffer around the centerline of the proposed transmission line route, resulting in an approximately 300-foot-wide corridor. Vegetation, non-wetland, and wetland waters were mapped in a survey area that totaled 577.60 acres. Survey methods, results, and maps of the survey area are included in Attachment 3.11-A: Aquatic Resources Delineation Report.

As depicted in Attachment 3.11-B: Hydrologic Features in the Proposed Project Area, 107 potentially jurisdictional features—including two potential wetland features, 89 ephemeral features, 14 intermittent features, and two perennial features—were mapped within the survey area. Table 3.11-1: Summary of Potentially Jurisdictional Aquatic Features within the Survey Area provides a summary of the anticipated jurisdictional area by agency and feature type. Table 3.11-2: Non-Wetland Waters within the Survey Area provides a detailed description of the non-wetland features that were identified, including unique feature identification numbers, hydrologic regimes, dimensions and/or area of each feature. The table also provides an assessment of jurisdiction for each agency, including the U.S. Army Corps of Engineers (USACE), RWQCB, and California Department of Fish and Wildlife (CDFW).

Table 3.11-1: Summary of Potentially Jurisdictional Aquatic Features within the Survey Area

Feature Type	Linear Feet	Approximate Jurisdictional Area (acres)[2]		
		USACE	RWQCB	CDFW
Ephemeral Non-Wetland Waters	29,916	Not Applicable (N/A)	1.60	2.66
Intermittent Non-Wetland Waters	4,022	0.56	0.56	1.16
Perennial Non-Wetland Waters	793	0.58	0.58	0.60
Wetlands	N/A	7.17	7.17	7.17
Total	**34,731**	**7.78**	**9.91**	**11.59**

Additionally, potential wetlands were identified within the survey area near the Loveland Reservoir as indicated by the dominance of hydrophytic vegetation and/or wetland hydrology (i.e., inundation visible on aerial imagery). Soil analysis was not completed because these features are not located within proposed work areas and/or due to lack of access permission.

[2] The area within the ordinary high water mark (OHWM) was used to measure the area of non-wetland waters under the jurisdiction of the USACE and RWQCB. The distance between each top of bank (TOB) was used to measure the area of non-wetland waters under the jurisdiction of the CDFW. Areas exhibiting wetland vegetation, hydrology, or soils within the OHWM were included as non-wetland waters per USACE regional guidance (USACE 2008).

Table 3.11-2: Non-Wetland Waters within the Survey Area

Feature ID	Hydrological Regime	Nearest Proposed Project Component	Page Number in Attachment 3.11-B	Length of Non-Wetland Water in Survey Area (feet)	Average OHWM Width (feet)	Average OHWM Depth (feet)	USACE-Jurisdictional Area (acres)	RWQCB-Jurisdictional Area (acres)	Average TOB Width (feet)	Average TOB Depth (feet)	CDFW-Jurisdictional Area (acres)	Feature Description
JD-001	Intermittent	Proposed 230 kV UG Segment	2	295	6.00	2.67	0.04	0.04	10.67	4.00	0.07	Forester Creek
JD-002	Intermittent	Proposed 230 kV UG Segment	3	52	2.50	1.00	<0.01	<0.01	4.00	2.00	<0.01	Forester Creek
JD-003	Intermittent	Proposed 230 kV UG Segment	3	258	4.00	1.00	0.02	0.02	6.00	2.00	0.04	Forester Creek
JD-004	Intermittent	Proposed 230 kV UG Segment	3	117	4.00	1.00	0.01	0.01	6.00	1.50	0.02	Forester Creek
JD-005	Ephemeral	Proposed 230 kV UG Segment	6	201	1.67	0.75	N/A	0.01	3.50	1.50	0.02	Unnamed tributary to Forester Creek
JD-006	Ephemeral	Proposed 230 kV UG Segment	7	99	1.00	0.50	N/A	<0.01	8.67	4.00	0.02	Unnamed tributary to Forester Creek
JD-007	Ephemeral	Proposed 230 kV UG Segment	7	187	4.00	1.00	N/A	0.02	7.00	2.00	0.03	Unnamed tributary to Forester Creek
JD-008	Ephemeral	Proposed 230 kV UG Segment	7	262	1.75	1.00	N/A	0.01	2.75	1.38	0.02	Unnamed tributary to Forester Creek
JD-009	Ephemeral	Proposed 230 kV UG Segment	8	49	3.00	1.50	N/A	<0.01	4.00	2.00	<0.01	Unnamed tributary to Forester Creek
JD-010	Ephemeral	Proposed 230 kV UG Segment	8	168	1.00	1.00	N/A	<0.01	2.00	2.50	0.01	Unnamed tributary to Forester Creek
JD-011	Ephemeral	Proposed 230 kV UG Segment	10	151	1.00	1.00	N/A	<0.01	2.00	2.50	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-012	Ephemeral	Proposed 230 kV UG Segment	10	363	1.50	0.50	N/A	0.01	2.50	1.50	0.02	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-013	Ephemeral	Proposed 230 kV UG Segment	11	139	1.50	0.50	N/A	<0.01	2.50	1.25	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-014	Ephemeral	Proposed 230 kV UG Segment	11	212	1.50	0.38	N/A	0.01	2.50	0.63	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-015	Ephemeral	Proposed 230 kV UG Segment	12	186	2.00	0.75	N/A	0.01	3.00	1.00	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-016	Ephemeral	Pole 2-B	12	227	3.33	3.00	N/A	0.02	4.67	4.00	0.02	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-017	Ephemeral	Pole 2-A	12	293	1.50	1.00	N/A	0.01	2.50	1.50	0.02	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-018	Ephemeral	Pole 3	13	408	0.50	0.50	N/A	<0.01	1.00	1.00	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-019	Ephemeral	Pole 3	13	190	0.50	0.25	N/A	<0.01	0.75	1.00	<0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-020	Perennial	Pole 4	14	380	7.00	1.00	0.06	0.06	9.67	3.00	0.08	Unnamed perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-021	Ephemeral	Pole 4	15	103	0.28	1.00	N/A	<.01	0.50	1.50	<0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-022	Ephemeral	Pole 4	15	131	1.00	0.50	N/A	0.01	1.75	0.75	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.

Feature ID	Hydrological Regime	Nearest Proposed Project Component	Page Number in Attachment 3.11-B	Length of Non-Wetland Water in Survey Area (feet)	Average OHWM Width (feet)	Average OHWM Depth (feet)	USACE-Jurisdictional Area (acres)	RWQCB-Jurisdictional Area (acres)	Average TOB Width (feet)	Average TOB Depth (feet)	CDFW-Jurisdictional Area (acres)	Feature Description
JD-023	Ephemeral	Pole 5	15	70	1.00	0.25	N/A	<0.01	1.50	0.50	<0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-024	Ephemeral	Pole 5	15	364	1.25	0.63	N/A	0.01	2.50	1.00	0.02	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-025	Ephemeral	Pole 5	15	232	1.13	0.38	N/A	0.01	2.50	0.50	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-026	Ephemeral	Pole 5	15, 16	427	3.00	1.00	N/A	0.03	4.33	2.00	0.04	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-027	Ephemeral	Pole 5	16	365	1.00	1.00	N/A	0.01	1.50	1.50	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-028	Ephemeral	Pole 6	16	265	1.50	0.50	N/A	0.01	2.50	0.50	0.02	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-029	Ephemeral	Pole 6	16	148	1.00	1.00	N/A	<0.01	2.00	1.00	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-030	Ephemeral	Pole 6	16, 17	149	1.00	1.00	N/A	<0.01	2.50	3.00	0.01	Unnamed tributary to a perennial stream within Harbison Canyon. Flow path continues into the Sweetwater River.
JD-031	Ephemeral	Pole 6	17	329	1.00	0.63	N/A	0.01	1.75	1.50	0.01	Unnamed tributary to the North Fork Sweetwater River
JD-032	Ephemeral	Pole 8	18	318	1.50	0.50	N/A	0.01	1.75	2.00	0.01	Unnamed tributary to the North Fork Sweetwater River
JD-033	Ephemeral	Pole 8	18	350	2.00	1.00	N/A	0.02	4.00	1.50	0.03	Unnamed tributary to the North Fork Sweetwater River
JD-034	Ephemeral	Pole 9	18	311	2.33	0.75	N/A	0.02	4.33	1.67	0.03	Unnamed tributary to the North Fork Sweetwater River
JD-035	Intermittent	Pole 9	19	346	5.00	2.00	0.04	0.04	8.00	3.00	0.06	Unnamed tributary to the North Fork Sweetwater River
JD-036	Ephemeral	Pole 14	24	342	2.33	0.75	N/A	0.02	4.00	3.00	0.03	Unnamed tributary to the North Fork Sweetwater River
JD-037	Ephemeral	Pole 15	26	322	3.50	0.75	N/A	0.03	5.00	1.25	0.04	Unnamed tributary to the North Fork Sweetwater River
JD-038	Ephemeral	Pole 16	26	473	1.00	1.00	N/A	0.01	6.00	3.00	0.07	Unnamed tributary to the North Fork Sweetwater River
JD-039	Intermittent	Pole 18	27/28	328	2.00	1.17	0.02	0.02	6.00	2.00	0.05	Unnamed tributary to the North Fork Sweetwater River
JD-040	Intermittent	Pole 18	28	29	10.00	0.25	0.01	0.01	12.00	0.25	0.01	Unnamed tributary to the North Fork Sweetwater River
JD-041	Intermittent	Pole 18	28	192	1.00	1.00	<0.01	<0.01	1.00	1.00	<0.01	Unnamed tributary to the North Fork Sweetwater River
JD-042	Ephemeral	Pole 19	29	353	2.50	1.50	N/A	0.02	3.00	2.50	0.02	Unnamed tributary to the North Fork Sweetwater River
JD-043	Ephemeral	Pole 19	29/30	301	2.00	0.75	N/A	0.01	4.00	3.67	0.03	Unnamed tributary to the North Fork Sweetwater River
JD-044	Ephemeral	Pole 20	30	8	3.00	0.50	N/A	<0.01	4.00	1.00	<0.01	Unnamed tributary to the North Fork Sweetwater River
JD-045	Intermittent	Pole 20	30	119	3.00	1.00	0.01	0.01	6.00	2.00	0.02	Unnamed tributary to the North Fork Sweetwater River
JD-046	Ephemeral	Pole 21	30	67	2.00	0.25	N/A	<0.01	3.00	0.50	<0.01	Unnamed tributary to the North Fork Sweetwater River
JD-047	Ephemeral	Pole 21	30/31	373	2.75	1.75	N/A	0.02	4.50	2.50	0.04	Unnamed tributary to the North Fork Sweetwater River
JD-048	Ephemeral	Pole 21	30/31	348	1.50	0.50	N/A	0.01	3.50	0.88	0.03	Unnamed tributary to the North Fork Sweetwater River

Feature ID	Hydrological Regime	Nearest Proposed Project Component	Page Number in Attachment 3.11-B	Length of Non-Wetland Water in Survey Area (feet)	Average OHWM Width (feet)	Average OHWM Depth (feet)	USACE-Jurisdictional Area (acres)	RWQCB-Jurisdictional Area (acres)	Average TOB Width (feet)	Average TOB Depth (feet)	CDFW-Jurisdictional Area (acres)	Feature Description
JD-049	Ephemeral	Pole 21	31/32	376	2.00	1.00	N/A	0.02	4.33	4.50	0.04	Unnamed tributary to the North Fork Sweetwater River
JD-050	Ephemeral	Pole 22	31/32	536	1.00	1.00	N/A	0.01	2.00	1.50	0.02	Unnamed tributary to the North Fork Sweetwater River
JD-051	Ephemeral	Pole 23	32	497	2.00	0.58	N/A	0.02	8.00	4.67	0.09	Unnamed tributary to Loveland Reservoir
JD-052	Intermittent	Pole 23	33	403	6.00	1.50	0.06	0.06	8.00	6.33	0.07	Unnamed tributary to Loveland Reservoir
JD-053	Ephemeral	Pole 24	33	68	1.00	0.25	N/A	<0.01	3.00	2.00	<0.01	Unnamed tributary to Loveland Reservoir
JD-054	Ephemeral	Pole 24	33	296	2.00	0.50	N/A	0.01	3.00	2.00	0.02	Unnamed tributary to Loveland Reservoir
JD-055	Intermittent	Pole 24	33	408	3.50	0.38	0.03	0.03	8.00	4.00	0.07	Unnamed tributary to Loveland Reservoir
JD-056	Ephemeral	Pole 25	34	314	1.50	0.25	N/A	0.01	4.50	2.00	0.03	Unnamed tributary to Loveland Reservoir
JD-057	Ephemeral	Pole 26	34	195	5.00	0.38	N/A	0.02	8.00	3.33	0.04	Unnamed tributary to Loveland Reservoir
JD-058	Ephemeral	Pole 26	34	104	1.00	0.25	N/A	<0.01	4.50	0.75	0.01	Unnamed tributary to Loveland Reservoir
JD-059[3]	Ephemeral	Pole 27	35	106	1.00	0.25	N/A	<0.01	4.50	1.50	0.01	Unnamed tributary to Loveland Reservoir
JD-061[4]	Perennial	Pole 28	36	413	50.00	12.50	0.52	0.52	50.00	12.50	0.52	Sweetwater River
JD-063	Ephemeral	Pole 29	37	307	3.00	1.00	N/A	0.02	5.00	2.00	0.04	Unnamed tributary to Loveland Reservoir
JD-064	Intermittent	Pole 31	38	382	20.00	1.00	0.18	0.18	50.00	10.00	0.47	Taylor Creek
JD-065	Ephemeral	Pole 32	38/39	792	2.00	1.00	N/A	0.04	3.50	2.00	0.06	Unnamed tributary to Taylor Creek
JD-066	Ephemeral	Pole 33	38	255	3.00	1.00	N/A	0.02	4.00	2.00	0.02	Unnamed tributary to Taylor Creek
JD-067	Ephemeral	Pole 33	38	57	1.00	1.00	N/A	<0.01	2.00	1.00	<0.01	Unnamed concrete-lined brow ditch tributary to Taylor Creek
JD-068	Ephemeral	Pole 33	38	58	3.00	0.50	N/A	<0.01	4.00	1.00	0.01	Unnamed tributary to Taylor Creek
JD-069	Ephemeral	Pole 33	38	73	3.00	1.00	N/A	0.01	4.00	3.00	0.01	Unnamed tributary to Taylor Creek
JD-070	Ephemeral	Pole 33	40	159	2.00	0.50	N/A	0.01	2.50	1.00	0.01	Unnamed tributary to Loveland Reservoir
JD-071	Ephemeral	Pole 36	40	231	2.25	0.38	N/A	0.01	2.50	0.75	0.01	Unnamed tributary to Loveland Reservoir
JD-072	Ephemeral	Pole 36	40	675	3.33	1.17	N/A	0.05	6.00	3.00	0.09	Unnamed tributary to Loveland Reservoir
JD-073	Ephemeral	Pole 37	40	53	1.50	0.50	N/A	<0.01	3.33	1.50	<0.01	Unnamed tributary to Loveland Reservoir
JD-074	Ephemeral	Pole 36	40	507	2.00	0.50	N/A	0.02	3.00	1.00	0.03	Unnamed tributary to Loveland Reservoir
JD-075	Ephemeral	Pole 36	41	231	2.00	1.00	N/A	0.01	4.00	3.33	0.02	Unnamed tributary to Loveland Reservoir
JD-076	Ephemeral	Pole 37	42	257	5.67	0.75	N/A	0.03	10.67	2.00	0.06	Unnamed tributary to Loveland Reservoir
JD-077	Ephemeral	Pole 40	42/43	95	1.50	0.75	N/A	<0.01	2.50	2.50	0.01	Unnamed tributary to Loveland Reservoir
JD-078	Ephemeral	Pole 41	43	43	1.67	1.33	N/A	<0.01	3.33	1.67	<0.01	Unnamed tributary to Loveland Reservoir
JD-079	Ephemeral	Pole 42	42/43	183	3.33	0.88	N/A	0.01	5.00	2.50	0.02	Unnamed tributary to Taylor Creek

[3] JD-60 does not exist, since this feature was combined with another feature.
[4] JD-062 was mapped as the TOB line for the Sweetwater River (JD-061) and used to calculate the jurisdictional area, but it is not a discrete feature. Therefore, it is not included in the results table.

Feature ID	Hydrological Regime	Nearest Proposed Project Component	Page Number in Attachment 3.11-B	Length of Non-Wetland Water in Survey Area (feet)	Average OHWM Width (feet)	Average OHWM Depth (feet)	USACE-Jurisdictional Area (acres)	RWQCB-Jurisdictional Area (acres)	Average TOB Width (feet)	Average TOB Depth (feet)	CDFW-Jurisdictional Area (acres)	Feature Description
JD-080	Ephemeral	Pole 42	42	41	1.67	0.83	N/A	<0.01	3.33	1.67	<0.01	Unnamed tributary to Taylor Creek
JD-081	Ephemeral	Pole 42	43	364	4.00	1.33	N/A	0.03	8.00	5.00	0.06	Unnamed tributary to Taylor Creek
JD-082	Ephemeral	Pole 42	44	551	2.50	0.38	N/A	0.03	4.00	2.00	0.05	Unnamed tributary to Taylor Creek
JD-083	Ephemeral	Pole 43	44	371	2.00	1.00	N/A	0.02	3.50	2.00	0.03	Unnamed tributary to Taylor Creek
JD-084	Ephemeral	Pole 49	45	62	2.50	0.50	N/A	<0.01	4.33	1.50	0.01	Unnamed tributary to Taylor Creek
JD-085	Ephemeral	Pole 49	46	734	2.00	0.38	N/A	0.03	4.00	2.00	0.07	Unnamed tributary to Taylor Creek
JD-086	Ephemeral	Pole 52	50	345	3.00	1.00	N/A	0.02	5.00	2.00	0.04	Unnamed tributary to Taylor Creek
JD-087	Intermittent	Pole 52	51	378	10.00	4.00	0.09	0.09	18.00	6.00	0.16	Unnamed tributary to Taylor Creek
JD-088	Intermittent	Pole 54	53/54	715	3.00	1.83	0.05	0.05	7.33	2.50	0.12	Unnamed tributary to Taylor Creek
JD-089	Ephemeral	Pole 56	56	452	1.00	0.50	N/A	0.01	4.33	2.00	0.04	Unnamed tributary to Taylor Creek
JD-090	Ephemeral	Suncrest Substation	57	83	3.00	1.00	N/A	0.01	4.00	1.00	0.01	Unnamed concrete drainage channel
JD-091	Ephemeral	Suncrest Substation	57	129	3.00	1.00	N/A	0.01	4.00	1.00	0.01	Unnamed concrete drainage channel
JD-092	Ephemeral	Suncrest Substation	57	334	3.00	1.00	N/A	0.02	4.00	1.00	0.03	Unnamed concrete drainage channel
JD-093	Ephemeral	Suncrest Substation	57	307	3.00	1.00	N/A	0.02	4.00	1.00	0.03	Unnamed concrete drainage channel
JD-094	Ephemeral	Suncrest Substation	57	265	3.00	1.00	N/A	0.02	4.00	1.00	0.02	Unnamed concrete drainage channel
JD-095	Ephemeral	Suncrest Substation	57	255	3.00	1.00	N/A	0.02	4.00	1.00	0.02	Unnamed concrete drainage channel
JD-096	Ephemeral	Suncrest Substation	57/58	972	2.50	1.00	N/A	0.06	3.00	1.00	0.07	Unnamed concrete drainage channel
JD-097[5]	Ephemeral	Suncrest Substation	57/58	287	2.00	1.00	N/A	0.01	3.00	1.00	0.02	Unnamed concrete drainage channel
JD-099	Ephemeral	Suncrest Substation	58	242	2.00	2.00	N/A	0.01	4.00	4.00	0.02	Unnamed concrete drainage channel
JD-100	Ephemeral	Suncrest Substation	57,58	383	3.00	1.00	N/A	0.03	4.00	1.00	0.04	Unnamed concrete drainage channel
JD-101	Ephemeral	Suncrest Substation	58	118	2.00	2.00	N/A	0.01	4.00	4.00	0.01	Unnamed concrete drainage channel
JD-102	Ephemeral	Suncrest Substation	58/59	708	2.00	2.00	N/A	0.03	4.00	4.00	0.07	Unnamed concrete drainage channel
JD-103	Ephemeral	Suncrest Substation	59	149	2.00	2.00	N/A	0.01	4.00	4.00	0.01	Unnamed concrete drainage channel
JD-104	Ephemeral	Suncrest Substation	59, 60	5,165	3.00	2.00	N/A	0.36	4.00	2.00	0.47	Unnamed concrete drainage channel
JD-105	Ephemeral	Suncrest Substation	59, 60	1,224	3.00	3.00	N/A	0.08	4.00	4.00	0.11	Unnamed concrete drainage channel
JD-106	Ephemeral	Suncrest Substation	59, 60	411	3.50	2.00	N/A	0.03	4.00	2.00	0.04	Unnamed concrete drainage channel
JD-107	Ephemeral	Suncrest Substation	60	97	3.00	1.00	N/A	0.01	4.00	1.00	0.01	Unnamed concrete drainage channel
JD-108	Ephemeral	Suncrest Substation	60	115	3.00	2.00	N/A	0.01	4.00	2.00	0.01	Unnamed concrete drainage channel

Source: Insignia 2026

[5] JD-98 does not exist, since this feature was combined with another feature.

Most of the features identified within the survey area are tributaries to or include segments of Forester Creek, Taylor Creek, North Fork Sweetwater River, and Sweetwater River (Insignia Environmental [Insignia] 2026). Eighteen aquatic features are potentially under the jurisdiction of the USACE.

All features mapped are potentially under the jurisdiction of the RWQCB and all natural features exhibiting natural channel morphology that support fish and wildlife are potentially under the jurisdiction of the CDFW. Some sections of the proposed 230 kV UG segment and the proposed 230 kV OH segment would cross hydrologic features. Section 3.11.3.2 Applicant-Proposed Measures and Best Management Practices provides a discussion of applicant-proposed measures (APMs) that would be implemented to avoid impacts to potentially jurisdictional waters that would be crossed by the Proposed Project.

3.11.1.3.2 Non-Jurisdictional Features

Non-jurisdictional features, including swales and erosional features, were observed primarily in the western portion of the Proposed Project where rural development is more prominent. These features were reviewed and determined to not fall under the jurisdiction of the USACE, RWQCB, or CDFW. Despite the ability of these features to carry surface water, these features are unable to support hydrophytic vegetation or soils and generally have an inconsistent and poorly defined OHWM. Further, these features do not provide physical or biological functions that are sufficient to have a meaningful impact on water quality or the biological environment. Therefore, non-jurisdictional features are not discussed further.

3.11.1.3.3 Surface Water Quality

The federal Clean Water Act (CWA) requires that California must report on the quality of its surface waterbodies (e.g., rivers, streams, reservoirs, estuaries, lagoons, bays, and ocean waters) every 2 years. To meet this requirement, California develops the Integrated Report, which consists of the CWA Section 303(d) list of impaired waters and 305(b) condition report. To develop the Integrated Report, data from California surface waters are evaluated and, if appropriate, assessed to determine if they contain pollutants at levels that exceed water quality standards. Development of the Integrated Report is a collaborative process between the State Water Resources Control Board (SWRCB) and RWQCBs with input from the public (SWRCB 2025). As defined in CWA Section 303(d), water quality impairments for waters crossed by or located near the Proposed Project components are identified in Table 3.11-3: Waterbodies and 303(d)-Listed Pollutants.

3.11.1.4 Flood Conditions

The Federal Emergency Management Agency (FEMA) maps the 100-year floodplain in the U.S. (i.e., areas with an annual flooding probability that is greater than 1 percent) (FEMA 2025). The 1-percent annual-chance flood is also referred to as the base flood or 100-year flood, and the area is labeled as a FEMA Zone A type on a Flood Insurance Rate Map (FIRM). Moderate flood hazard areas, labeled Zone B or Zone X, are also shown on a FIRM and are the areas between the limits of the base flood and the 0.2-percent annual-chance flood (or 500-year flood).

According to the FEMA National Flood Hazard Layer, the proposed 230 kV OH segment would cross a portion of the FEMA Zone AE along Harbison Canyon Road (FEMA 2025). Zone AE

corresponds to a 100-year flood zone that is based on the base flood elevation, as determined by detailed flood studies. No other Proposed Project components would cross a designated FEMA Flood Hazard Zone.

Table 3.11-3: Waterbodies and 303(d)-Listed Pollutants

Waterbody	Location Relative to the Proposed Project	303(d)-Listed Pollutants
Harbison Canyon	Crossed by the proposed 230 kV OH segment at Harbison Canyon Road	Indicator bacteria
Forester Creek	Approximately 500 feet south of the western terminus of the proposed 230 kV UG segment	Benthic community effects, chloride, indicator bacteria, nitrogen, oxygen, dissolved, phosphorus, selenium, total dissolved solids (TDS), and turbidity
Sweetwater River, North Fork, and unnamed tributary at Tavern Road	Crossed by the proposed 230 kV OH segment near Tavern Road	Indicator bacteria and manganese
Sweetwater River, Upper (above Loveland Reservoir)	Crossed by the proposed 230 kV OH segment south of Japatul Road	Toxicity[6]

Source: SWRCB 2024

3.11.1.5 Groundwater Resources

The Proposed Project would lie within the South Coast Hydrologic Region, partially within the El Cajon Valley Groundwater Basin[7] toward the western terminus of the proposed 230 kV UG segment and would drain downstream to the Coastal Plain of San Diego Groundwater Basin to the southwest of the Proposed Project Area. Based on data derived from local private wells within the Proposed Project Area, the depth to groundwater ranges from 50 to 1,200 feet below ground surface (bgs) along the Proposed Project alignment (California Department of Water Resources [DWR] 2025a).

Groundwater levels in the South Coast Hydrologic Region are generally stable with over 50 percent of monitoring wells showing no change in groundwater elevation between 1998 and 2018. A declining trend was found in 39 percent of monitoring wells, with 7 percent experiencing a declining trend of more than 2.5 feet per year over this 20-year period and 32 percent of monitoring wells showing a declining trend of less than 2.5 feet per year. Approximately 10 percent of monitoring wells in the region experienced an increasing trend over the same 20-year period (California Natural Resources Agency [CNRA] 2020).

[6] For analysis related to the 2024 Integrated Report, the SWRCB measured toxicity levels by exposing test organisms consisting of vertebrate, invertebrate, and plant species to water or sediment samples to determine if the samples result in a statistically significant difference in mortality, growth, and reproduction when compared to a control sample.

[7] The term "groundwater basin" is defined as an alluvial aquifer or a stacked series of alluvial aquifers with reasonably well-defined boundaries in a lateral direction with a definable bottom. A groundwater basin is three-dimensional and includes both the surface extent and all of the subsurface freshwater yielding material.

3.11.1.5.1 El Cajon Valley Groundwater Basin

The El Cajon Valley Groundwater Basin lies in the south-central part of San Diego County. The basin is bounded by impermeable crystalline rocks on the south and east sides, by semi-permeable older Tertiary sedimentary rocks on the west, and by the San Diego River Valley Groundwater Basin on the north (CNRA 2003). The total storage capacity of this basin is estimated to be approximately 32,500 acre-feet (DWR 2004). The El Cajon Valley Groundwater Basin is currently designated as a very low-priority basin and does not currently require the development of a groundwater sustainability agency (GSA) (DWR 2025b).

Groundwater Quality

Groundwater in the El Cajon Valley Groundwater Basin is generally of a sodium-chloride character. Water from wells sampled in 1984 had TDS concentrations ranging from 637 to 3,960 milligrams per liter (mg/L) with a mean value of 1,640 mg/L. Water from one public supply well had a TDS concentration of 2,340 mg/L (DWR 2004).

3.11.1.5.2 Coastal Plain of San Diego Groundwater Basin

The Coastal Plain of San Diego Groundwater Basin underlies the cities of San Diego, National City, Chula Vista, Imperial Beach, and San Ysidro in southwestern San Diego County. The Sweetwater River, which would accept stormwater flows from much of the proposed 230 kV OH segment, drains southwest toward the Coastal Plain of San Diego Groundwater Basin. The basin boundary represents the area underlain by the San Diego Formation. The basin is bound on the west by San Diego Bay and the Pacific Ocean. The basin is bound on the south by the international border with Mexico and is bound on the north by the alluvium of the Mission Valley Basin. The basin is bound on the east by the La Nacion fault and the lateral extents of the San Diego Formation and the alluvial areas in the Otay Valley and Sweetwater Valley (DWR 2004). The San Diego County Water Authority estimates a groundwater storage capacity of approximately13,000 acre-feet in Quaternary alluvium and approximately 960,000 acre-feet in the San Diego Formation. These values suggest a total storage capacity of approximately 973,000 acre-feet for this basin (DWR 2004). Based on an online review of the DWR's Groundwater Prioritization Dashboard, the Coastal Plain of San Diego Groundwater Basin is designated as a low-priority basin and does not currently require the development of a GSA.

Groundwater Quality

Generally, the groundwater in the alluvium is of a sodium-calcium chloride character, with a TDS concentration ranging from 300 to more than 50,000 parts per million. In the San Diego Formation, the water is of a sodium-chloride character, and the TDS content ranges from 600 to 1,600 mg/L. Data from nine public supply wells shows the TDS concentration ranges from 1,249 to 3,320 mg/L, with an average of approximately 2,114 mg/L (DWR 2004b).

3.11.1.5.3 Groundwater Management

The DWR ranks basins as either very low, low, medium, or high priority based on the results from the statewide prioritization evaluation process of 515 basins/subbasins[8], using consistent data and methodology. These four rankings provide an indicator of the overall relative importance of groundwater in relation to the components identified in the established California Water Code for each of the state's basins or subbasins, and the applicability of the State Groundwater Management Act (SGMA). The SGMA requires medium- and high-priority basins to develop GSAs, develop groundwater sustainability plans (GSPs), and manage groundwater for long-term sustainability (DWR 2025b). As stated previously, the El Cajon Valley Groundwater Basin is currently designated as very low priority, and the Coastal Plain of San Diego Groundwater Basin is designated as low priority; as such, GSPs have not been developed for these basins (DWR 2025c).

3.11.2 Regulatory Setting

The federal, state, and local regulatory requirements described in the following subsections pertain to the Proposed Project. SDG&E would adhere to these requirements as applicable to the Proposed Project.

3.11.2.1 Federal

3.11.2.1.1 Clean Water Act

The CWA (33 U.S. Code [U.S.C.] § 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of waters of the U.S. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point-source and certain non-point-source discharges to surface water.

Section 402

The National Pollutant Discharge Elimination System (NPDES) program was established in 1972 to control discharges of pollutants from defined point sources (33 U.S.C. § 1342). The program originally focused on industrial-process wastewater and Publicly Owned Treatment Works. In 1987, Section 402 of the CWA was amended to include requirements for five separate categories of storm water discharges, known as Phase I facilities, which include the following:

- facilities already covered by an NPDES permit for storm water,
- facilities that engage in industrial activities,
- large municipal separate storm drain systems (MS4s) that serve more than 250,000 people,
- medium MS4s that serve between 100,000 and 250,000 people, and
- facilities that are considered significant contributors of pollutants to waters of the U.S.

[8] A subbasin is created by dividing a groundwater basin into smaller units using geologic and hydrologic barriers (or, more commonly, institutional boundaries). These subbasins are created for the purpose of collecting and analyzing data, managing water resources, and managing adjudicated basins.

The U.S. Environmental Protection Agency (EPA) issued a final rule for Phase II discharges in August 1995. Phase II storm water discharges include the following:

- light industrial facilities,
- small construction sites (i.e., sites disturbing between 1 and 5 acres of land), and
- small municipalities (i.e., populations of less than 100,000 people).

In California, NPDES permitting authority is delegated to the SWRCB and is generally administered by the nine RWQCBs. The Proposed Project would be required to comply with Section 402 of the CWA. Further information regarding NPDES permitting requirements, including the Construction General Permit (CGP), is provided in Section 3.11.2.3.1 State Water Resources Control Board Construction General Permit.

Section 404

Section 404 of the CWA authorizes the USACE to regulate the discharge of dredged or fill material to waters of the U.S., including wetlands (33 U.S.C. § 1344). The USACE issues individual site-specific or general (e.g., Nationwide) permits for such discharges. The Proposed Project is not anticipated to discharge dredged or fill material to waters of the U.S. and therefore would not be required to obtain permit coverage under Section 404 of the CWA.

Section 401

Under Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters must provide the licensing or permitting agency with a Water Quality Certification (WQC) that the discharge will comply with the applicable CWA provisions or a waiver (33 U.S.C. § 1341). If a federal permit is required, such as a USACE permit for dredge and fill discharges, the project proponent must also obtain a WQC from the SWRCB or RWQCB. The Proposed Project is not anticipated to discharge dredged or fill material to waters of the U.S. and therefore would not be required to obtain permit coverage under Section 401 of the CWA.

Sections 303 and 304

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the U.S. (33 U.S.C. § 1313). Section 304(a) requires the U.S. EPA to publish water quality criteria that accurately reflects the latest scientific knowledge on the kind and extent of effects that pollutants in water may have on health and welfare (33 U.S.C. § 1314[a]). Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed when numerical standards cannot be established or when they are needed to supplement numerical standards.

Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which the U.S. EPA has published water quality criteria and that could reasonably be expected to interfere with designated uses in a waterbody.

Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop a list of waterbodies with poor water quality. The waterbodies on the list do not meet

water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these regulatory agencies establish priority rankings for water segments on the lists and develop action plans, called Total Maximum Daily Loads, to improve water quality for these waterbodies.

3.11.2.1.2 Southern California National Forests Land Management Plan

The Soil, Water, and Air Program of Part 2: Cleveland National Forest Strategy of the Southern California National Forests Land Management Plan (LMP) encompasses all activities associated with the management of water quality and supply, soil productivity and stability, air quality management, hazardous materials mitigation, and geologic and paleontological resource management on National Forest lands. National Forest managers are required to emphasize management of groundwater and surface water resources to benefit ecosystem health and National Forest administrative needs on their respective forests.

The strategies in the following subsections pertain to surface and groundwater hydrology and water quality.

AM 2 – Forest-Wide Inventory

Forest-wide inventory is a CNF LMP policy, which promotes developing and maintaining the capacity to provide and analyze the scientific and technical information needed to address agency priorities by engaging in the following actions:

- Survey wetlands, vernal pools, meadows, springs and stringer meadows for plant and wildlife species (e.g., spring snails).
- Identify and map all riparian areas.
- Inventory and analyze geologic and hydrologic resources (e.g., fossils, caves, groundwater basins and extractions, geologic Special Interest Areas, and geologic features along scenic corridors) that are available to the public, affect other resources, or need special management or protection.
- Identify and mitigate geologic hazards (e.g., seismic activity, sliding land, land subsidence, flooding, and erosion) through landscape and watershed planning, sediment placement site planning, engineering design, reclamation, and maintenance.
- Inventory surface and groundwater extractions, diversions, miles/acres of streams, acres of waterbodies, and acres of riparian.
- The validation of watershed standards for cumulative effects (less than 20 percent manipulation/year and less than 40 percent over 5 years).

WAT 1 – Watershed Function

Watershed function is a policy providing the protection, maintenance, and restoration of natural watershed functions (e.g., slope processes, surface water and groundwater flow, and retention and riparian area sustainability) by the following actions:

- Restore, maintain, and improve watershed conditions. Assure that approved and funded rehabilitation and emergency watershed treatments are implemented in an effective and timely manner.

- Maintain or restore soil properties and productivity to ensure ecosystem health (soil microbiota and vegetation growth), soil hydrologic function, and biological buffering capacity.

- Manage riparian conservation areas (RCAs) to maintain or improve conditions for riparian dependent resources. RCAs include aquatic and terrestrial ecosystems and lands adjacent to perennial, intermittent, and ephemeral streams, as well as around meadows, lakes, reservoirs, ponds, wetlands, vernal pools, seeps, springs, and other waterbodies. Riparian-dependent resources are those natural resources that owe their existence to the area, such as fish, amphibians, reptiles, fairy shrimp, aquatic invertebrates, plants, birds, mammals, soil, and water quality.

- Maintain natural stream channel conductivity, connectivity, and function.

- Assess and manage geologic resources and hazards to integrate earth science principals and relationships into ecosystem management, reduce risks to people and resources, and to interpret and protect unique values.

- Identify, prioritize based on risk, and mitigate the impacts of abandoned and inactive landfills on water, soil, and other resources. Stabilize and reclaim, where necessary, abandoned and inactive landfills to maintain proper watershed function, public safety, and resource benefit.

- Maintain watershed integrity by replacing or disposing of displaced soil and rock debris in approved placement sites.

WAT 2 – Water Management

Water management is a policy for the management of groundwater and surface water to maintain or improve water quantity and quality in ways that minimize adverse effects. The management policy outlines the following actions:

- Assess the impacts of existing and proposed groundwater extractions and tunneling projects and proposals to ensure that developments will not adversely affect aquatic, riparian, or upland ecosystems and other uses, resources, or rights (e.g., tribal water rights).

- Promote water conservation at all National Forest administrative and authorized facilities. Protect and improve water quality through implementing best management practices (BMPs) and other project-specific water quality protection measures for all National Forest and authorized activities. Include appropriate conservation and water quality mitigation measures in the review response when reviewing non-forest water-related projects that may affect forest resources.

- Conserve and protect high-quality water sources in quantities adequate to meet National Forest needs.

- Take corrective actions to minimize conditions leading to state listing of 303(d) impaired waters on National Forest System land. For those waters that are both on and off National Forest System land, ensure U.S. Forest Service (USFS) management does not contribute to listed water quality degradation.

- Actively pursue the acquisition of water rights and water allocation processes to secure instream flow and groundwater resources for current and future needs sufficient to sustain native riparian dependent resources and other forest resources and uses.

- Identify the need for and encourage the establishment of water releases for current and future uses to maintain instream flow needs, including channel maintenance, and to protect and eliminate impacts on riparian-dependent resources.

- Monitor water development projects to ensure that instream flows are meeting riparian-dependent resource needs.

- To maintain or improve habitat containing threatened, endangered, proposed, candidate, and sensitive species, coordinate activities with the CDFW, NOAA National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service (USFWS), SWRCB, and other appropriate agencies involved in recommending instream flow and surface water requirements for waterways.

- Cooperate with federal, tribal, state and local governments, and private entities to secure the instream flows that are needed to maintain, recover, and restore riparian-dependent resources, channel conditions, and aquatic habitat.

WAT 3 – Hazardous Materials

Hazardous materials is a policy for the management of known hazardous materials risks. The management policy outlines the following actions:

- Develop a Hazardous Materials Response Plan that addresses risk and standard cleanup procedures.

- Coordinate with federal, tribal, state, city, and county agencies, and local landowners to develop emergency response guidelines for hazardous spills on National Forest System land or on adjacent non-National Forest System land with the potential to affect threatened, endangered, proposed, candidate, and sensitive fish and amphibian habitat. In

the event of hazardous material spills in known habitat on National Forest System land, the USFS will contact the USFWS and NOAA Fisheries (as appropriate) within 24 hours. Quickly contact resource personnel and use them as consultants to minimize impacts to habitat and to initiate emergency consultation with the USFWS if necessary. Provide habitat maps to response personnel for hazardous spills.

3.11.2.1.3 National Flood Insurance Act of 1968

FEMA is responsible for determining flood elevations and floodplain boundaries based on USACE studies, and also for distributing the FIRMs used in the National Flood Insurance Program (NFIP). These maps identify the locations of special flood hazard areas, including the 100-year floodplain. FEMA allows non-residential development in floodplains; however, construction activities are restricted within flood hazard areas depending on the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR), enabling FEMA to require municipalities that participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year floodplains.

3.11.2.1.4 Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply (40 CFR 141). The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources, which include rivers, lakes, reservoirs, springs, and groundwater wells (the SDWA does not regulate private wells that serve fewer than 25 individuals). The SDWA authorizes the EPA to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. The EPA, states, and water systems then work together to make sure that these standards are met.

3.11.2.2 State

3.11.2.2.1 California Fish and Game Code Sections 1600 to 1617

Sections 1601 through 1606 of the California Fish and Game Code require an agreement between the CDFW and an entity proposing to substantially divert or obstruct the natural flow or affect changes to the bed, channel, or bank of any river, stream, or lake. The agreement is designed to protect the fish and wildlife values of rivers, lakes, and/or streams in California. The Proposed Project is not currently anticipated to directly impact CDFW-jurisdictional aquatic resources; therefore, a Lake and Stream Bed Alteration Agreement may not be required.

3.11.2.2.2 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne) (California Water Code § 13000 et seq.) provides guidance for the protection of water quality and beneficial uses of waters of the state and, along with the CWA, provides the overarching statutory authorization that governs the actions of the SWRCB and RWQCBs. Waters of the state are defined as any surface water or groundwater, including saline waters, that are within the boundaries of the state (Public Resources Code § 71200). This differs from the CWA definition of waters of the U.S. by its inclusion of groundwater and waters outside the OHWM in its jurisdiction.

Porter-Cologne requires that each RWQCB adopt a basin plan for the region. Pursuant to Porter-Cologne, these basin plans become part of the California Water Plan when such plans have been reported to the legislature (California Water Code § 13141). Individual basin plans are prepared for each RWQCB. These plans set implementation policies, goals, and water management practices in accordance with Porter-Cologne. NPDES permits, waste discharge requirements (WDRs), and waivers are mechanisms used by the RWQCBs, including the San Diego RWQCB, to control discharges and protect water quality. The Proposed Project is not currently anticipated to directly impact a water of the state; therefore, a permit from may not be required.

The Proposed Project is located within the jurisdiction of the San Diego RWQCB (Region 9), and it is subject to the water quality standards described the Basin Plan. The San Diego RWQCB is responsible for protecting the beneficial uses of surface water and groundwater resources in the San Diego Bay Watershed. The Proposed Project is not currently anticipated to impact a water of the state; therefore, a permit may not be required.

3.11.2.3 State Wetland Definition

Pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB also regulates "isolated wetlands," or those wetlands considered to be outside of the USACE's jurisdiction, pursuant to the SWANCC decision. In 2019, the SWRCB further defined which wetlands are considered waters of the state in the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures). The Procedures became effective on May 28, 2020 (SWRCB 2021). According to the Procedures, an area is a wetland if it meets the following three criteria:

- The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both.
- The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate.
- The area's vegetation is dominated by hydrophytes, or the area lacks vegetation.

3.11.2.3.1 State Water Resources Control Board Construction General Permit

On September 8, 2022, the SWRCB adopted Order No. 2022-0057-DWQ (Construction General Permit [CGP]), which reissued the Order 2009-0009-DWQ and previous Order 99-08-DWQ for projects disturbing 1 acre or more of land, or that are part of a common plan of development or sale that disturbs more than 1 acre of land. The new permit became effective on September 1, 2023, and all new dischargers are required to obtain coverage under the new permit by submitting Permit Registration Documents. Because the Proposed Project would disturb greater than 1 acre of land, SDG&E would obtain coverage under the CGP.

The CGP requires the implementation of a Storm Water Pollution Prevention Plan (SWPPP), which must be prepared before construction begins and must be kept on site throughout the construction process. In accordance with the CGP, the SWPPP must include the following:

- identification of pollutant sources and non-storm water discharges associated with construction activities;

- specifications for BMPs that will be implemented during project construction to minimize the potential for accidental releases and runoff from the construction areas, including temporary construction yards, pull sites, and other temporary work areas;
- calculations and design details, as well as BMP controls, for site run-off;
- BMPs used to eliminate or reduce pollutants after construction is complete; and
- certification from a Qualified SWPPP Developer (QSD).

3.11.2.3.2 State Water Resources Control Board General Permit for Discharges from Utility Vaults

The SWRCB adopted the Statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Waters of the U.S., Water Quality Order 2014-0174-DWQ, in October 2014. Water Quality Order 2014-0174-DWQ became effective on July 1, 2015. This General Permit covers short-term and intermittent discharges from utility vaults and underground structures to Waters of the U.S. Utilities eligible for coverage under this General Permit include suppliers of cable television, electricity, internet, natural gas, and telephone services. Water Quality Order 2014-0174-DWQ expired on June 29, 2020 but remains in effect until the SWRCB reissues the General Permit. SDG&E would obtain coverage under Water Quality Order 2014-0174-DWQ during O&M of the utility vaults.

3.11.2.4 Regional

3.11.2.4.1 Water Quality Control Plan for the San Diego Basin

Each RWQCB is responsible for water quality control planning within its region through a basin plan. The San Diego Basin Plan contains water quality objectives and policies, describes implementation programs for the protection of surface and groundwaters, and designates the beneficial uses for each waterbody. The following is a list of the beneficial uses relevant to the Proposed Project that the implementation activities described within the San Diego Basin Plan are designed to protect (RWQCB San Diego Region 2021):

- **Municipal and Domestic Supply (MUN)** - Includes uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
- **Agricultural Supply (AGR)** - Includes uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.
- **Industrial Process Supply (PROC)** - Includes uses of water for industrial activities that depend primarily on water quality.
- **Industrial Service Supply (IND)** - Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.

- **Contact Water Recreation (REC-1)** - Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.

- **Non-contact Water Recreation (REC-2)** - Includes the uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

- **Warm Freshwater Habitat (WARM)** - Includes uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

- **Cold Freshwater Habitat (COLD)** - Includes uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

- **Wildlife Habitat (WILD)** - Includes uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

- **Spawning, Reproduction, and/or Early Development (SPWN)** - Includes uses of water that support high quality habitats suitable for reproduction, early development and sustenance of marine fish and/or cold freshwater fish.

3.11.2.5 Local

3.11.2.5.1 County of San Diego

San Diego County General Plan

The Conservation Element of the San Diego County General Plan lists the following goal and policies that pertain to the Proposed Project (County of San Diego 2011):

- **Goal COS-4.1 Water Conservation.** Require development to reduce the waste of potable water through use of efficient technologies and conservation efforts that minimize the County's dependence on imported water and conserve groundwater resources.

- **Policy COS-5.2 Impervious Surfaces.** Require development to minimize the use of directly connected impervious surfaces and to retain storm water run-off caused from the development footprint at or near the site of generation.

- **Policy COS-5.3 Downslope Protection.** Require development to be appropriately sited and to incorporate measures to retain natural flow regimes, thereby protecting downslope

areas from erosion, capturing runoff to adequately allow for filtration and/or infiltration, and protecting downstream biological resources.

- **Policy COS-5.5 Impacts of Development to Water Quality.** Require development projects to avoid impacts to the water quality in local reservoirs, groundwater resources, and recharge areas, watersheds, and other local water sources.

Alpine Community Plan

The Alpine Community Plan was reviewed, and no policies relevant to the Proposed Project and hydrology and water quality were identified (County of San Diego 2020).

3.11.2.5.2 City of El Cajon

City of El Cajon General Plan

The Conservation Element of the City of El Cajon General Plan lists the following policies that pertain to the Proposed Project (City of El Cajon 2000):

- **Policy 8-8.1** Water conservation and reclamation programs shall be supported.

- **Policy 8-8.3** The San Diego Regional Water Quality Control Board shall be supported in the implementation of its policies relative to water pollution control.

- **Policy 8-10.4.** The City shall limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

- **Policy 8-10.5**. Prior to making land use decisions, the City will utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. The City shall require incorporation of structural and non-structural best management practices to mitigate the projected increases in pollutant loads and flows.

- **Policy 8-10.9** Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

3.11.3 Impact Analysis and Mitigation Measures

3.11.3.1 Analysis Methodology

Impacts to hydrology and water quality were determined based on information summarized in Section 3.11.1 Environmental Setting that was obtained from reviews of the following:

- the DWR Groundwater Management Bulletin;
- the DWR SGMA online data viewer;
- the DWR SGMA Basin Prioritization Dashboard;
- CNRA groundwater basin boundary descriptions;
- FEMA National Flood Hazard Layer Viewer;
- Project Clean Water watershed background information;
- SWRCB 303d-list information;

- the Proposed Project's Preliminary Jurisdictional Delineation Report; and
- local agency planning documents.

3.11.3.2 Applicant-Proposed Measures and Best Management Practices

The following APMs and BMPs would be implemented for the Proposed Project:

- **APM HYD-01: Minimize Impacts to Aquatic Features.** The final Project design will avoid impacts to aquatic features to the maximum extent practicable. Construction methods (e.g., HDD, horizontal boring, and trenching below an aquatic feature) will be used to avoid direct impacts to aquatic features to the greatest extent feasible. If an aquatic feature cannot be avoided, SDG&E will obtain the appropriate permits from the applicable state or federal agencies prior to impacting the water features. Mitigation for permanent impacts will be secured at a one-to-one ratio or as otherwise defined in the permits.

- **APM HYD-02: Maintain Existing Flow and Drainage Contours.** All temporary work areas disturbed during grading will be restored to their original contours, and the surrounding area will be restored and repaired, as appropriate. Permanent work areas will be designed to maintain existing flow patterns and flow velocities.

- **APM HYD-03: Jurisdictional Aquatic Resources Field Survey.** Prior to any ground disturbance or vegetation-clearing activities in areas where a jurisdictional delineation survey was not previously conducted due to property access restrictions[9], a field survey will be conducted to identify potentially jurisdictional aquatic resources within the work areas. If jurisdictional aquatic resources are observed to be located within the work areas during the survey, APM HYD-01 will be implemented to either avoid impacts or obtain permits for the impacts.

In addition to the APMs, SDG&E's Water Quality Construction BMP Manual (BMP Manual) defines BMPs to implement during construction in order to reduce the potential for pollutant discharge to water features during construction activities. The BMP Manual includes recommendations for the installation, inspection, and maintenance of specific water quality BMPs (e.g., gravel bags, straw wattle, sediment traps, and track-out controls) and references the California Stormwater Quality Association BMP Handbook (SDG&E 2024). These BMPs include procedures on installing erosion control devices, storm water management, stockpile management, spill control, and solid waste management.

[9] Although further discussed in Attachment 3.11-A: Aquatic Resources Delineation Report, some portions of the Proposed Project were not accessed during the field surveys due to either the lack of landowner access permissions or the steep topography and/or impenetrable vegetation. Therefore, these areas were not surveyed in the field. These inaccessible areas were assessed with binoculars from nearby vantage points while in the field and via a desktop review.

3.11.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For hydrology and water quality, the CEQA Environmental Checklist asks if the Proposed Project would:

- Violate any water quality standards or WDRs or otherwise substantially degrade surface or ground water quality?
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- result in a substantial erosion or siltation on- or off-site;
- substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;
- create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- impede or redirect flood flows?
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

3.11.3.4 Impact Analysis

3.11.3.4.1 Impact HYD-01: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction

Less-than-Significant Impact. As previously detailed in Table 3.11-2: Non-Wetland Waters within the Survey Area, a total of 107 potentially jurisdictional aquatic features were identified within the survey area that are located near or which cross the Proposed Project components. These aquatic features could potentially be impacted by construction activities, including trenching and machinery use that could cause erosion, discharge pollutants, and/or affect the natural hydrology of the features. SDG&E would implement APM HYD-01 to use design and construction methods in order to avoid impacts to these waterbodies to the maximum extent

practicable. As stated in Attachment 3.11-A: Aquatic Resources Delineation Report, portions of the survey area that could not be accessed (e.g., properties where landowner access was not approved, or areas that were too steep or densely vegetated to safely walk) were observed, to the extent possible, from accessible perimeters and/or with the use of binoculars. For these portions of the survey area, the potential for aquatic resources to occur within the work areas was determined via a desktop review. As potential for impacts to aquatic features cannot be viewed on aerial imagery, prior to ground disturbance or vegetation-clearing activities, SDG&E would implement APM HYD-03 to assess the potential for existing jurisdictional aquatic features to exist within the work areas previously not surveyed. If these areas are found to have jurisdictional waters during the survey conducted prior to ground-disturbing activities, APM HYD-01 would be implemented to update the design of the applicable Proposed Project components or work areas, where practicable, to avoid impacts to these water features. If an aquatic feature cannot be avoided, SDG&E would obtain the appropriate permits from the applicable state or federal agencies prior to impacting the aquatic feature.

Construction would require ground-disturbing activities (e.g., excavating trenches, grading, hauling construction waste) that could increase soil erosion rates and could potentially result in sedimentation in adjacent or downstream receiving waters (e.g., Forester Creek, Sweetwater River), which would be a violation of water quality standards. Materials used during construction of Proposed Project components and to maintain heavy equipment (e.g., diesel fuel, hydraulic fluid, oils, grease, and concrete) have the potential to be transported by storm water runoff and threaten aquatic life or groundwater quality in the event of spills or leaching. These materials could violate water quality standards if they contact storm water discharges and/or are transported to nearby water resources. As described in Section 3.5 Biological Resources, SDG&E would implement APM BIO-05 and would provide Worker Environmental Awareness Program (WEAP) training, which would include training on the transportation, handling, and disposal of hazardous materials. Additionally, APM BIO-10 would be implemented to provide spill prevention and control techniques to avoid impacts to nearby waterbodies. Further, SDG&E would implement the BMPs included in SDG&E's BMP Manual to avoid and minimize impacts to water quality. These BMPs include procedures on installing erosion control devices, storm water management, stockpile management, spill control, and solid waste management. With the implementation of the APMs and BMPs, impacts to water quality standards or WDRs would be less than significant.

Because ground disturbance associated with the Proposed Project is anticipated to exceed 1 acre, SDG&E would apply for NPDES permit coverage under the CGP (Water Quality Order No. 2022-0057-DWQ). The CGP requires submittal of a Notice of Intent; preparation of a Proposed Project-specific SWPPP; and implementation of site-specific BMPs to address materials management, non-storm water discharges, sediment discharges, and erosion controls to meet water quality standards. As part of the SWPPP development process, SDG&E would assess the Proposed Project's risk to water quality—based on site-specific soil characteristics, slope, and the construction schedule—and would implement appropriate BMPs to verify protection of water quality. The SWPPP would specify measures for each activity that has the potential to degrade surrounding water quality through erosion, sediment runoff, non-storm water discharge, and the presence of other pollutants. Implementation of the SWPPP would be monitored throughout the Proposed Project by a QSD and Qualified SWPPP Practitioner. Additionally, as described in Chapter 2 – Project Description, any encountered groundwater within excavations would be

dewatered using one or more pumps. The water would then either be discharged on site to an upland location, if permitted, or stored in Baker tanks or similar water retention equipment within the proposed staging/fly yards prior to off-site disposal. In most cases, groundwater encountered in excavations would be pumped directly into water trucks and transported to a temporary storage location or discharged on access roads and work areas for dust control purposes. With implementation of the SWPPP and the BMPs in SDG&E's BMP Manual, as well as the proper handling of encountered groundwater, impacts to water quality standards or WDRs would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. O&M activities may include use of materials that have the potential to contribute new pollutant sources, including oils, paints, and solvents. O&M activities for the proposed 230 kV transmission line and existing Suncrest Substation would be similar in nature to those occurring presently in the area and would not be anticipated to result in substantial water quality degradation. All materials would be applied, stored, and disposed of with appropriate containment in a manner consistent with manufacturer recommendations and in accordance with applicable regulations. No additional ground disturbance is anticipated during O&M, and the Proposed Project components would not include any planned or routine discharges of potential water pollutants. O&M activities may include intermittent dewatering of utility vaults; however, SDG&E would obtain coverage under the Statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Waters of the U.S. (General Order 2014-0174-DWQ) and would adhere to the requirements therein to minimize the discharge of pollutants. Therefore, impacts would be less than significant.

3.11.3.4.2 Impact HYD-02: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Construction

Less-than-Significant Impact. Construction of the approximately 11-mile proposed 230 kV OH segment and the upgrades to the existing Suncrest Station would generally occur above the groundwater table, and groundwater would not be encountered. As previously discussed, groundwater measurements in the Proposed Project Area range from 50 to 1,200 feet bgs. Therefore, construction activities associated with the installation of underground facilities and foundation hole drilling are not anticipated to encounter groundwater because the depth of drilling activities would be shallower than the expected depth to groundwater. As described in Chapter 2 – Project Description, any encountered groundwater within excavations would be dewatered using one or more pumps. The water would then either be discharged on site to an upland location, if permitted, or stored in Baker tanks or similar water retention equipment within the proposed staging/fly yards prior to off-site disposal. In most cases, groundwater encountered in excavations would be pumped directly into water trucks and transported to a temporary storage location or discharged on access roads and work areas for dust control purposes. As a result, impacts would be less than significant.

As described in Section 3.20 Utilities and Service Systems, it is estimated that 5 million to 10 million gallons of water would be required on site during construction of the Proposed

Project. Water would be sourced from Sweetwater Authority and/or Padre Dam Municipal Water District, both of which have sufficient supplies to accommodate the Proposed Project. Additionally, there would not be a significant increase in impervious surfaces that could potentially affect groundwater recharge as part of the Proposed Project design. As a result, impacts would be less than significant.

Operations and Maintenance

No Impact. O&M of the Proposed Project would not require significant water supplies because the proposed 230 kV transmission line and existing Suncrest Substation would be unmanned and remotely operated. As the Proposed Project would include the installation of toughened glass insulators and braced line post insulators, regular insulator washing is not required as part of O&M. The Proposed Project would not require water sources for O&M activities beyond what is currently being used at the substation. Therefore, no impact would occur.

3.11.3.4.3 Impact HYD-03: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on-site or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows?

Construction

Less-than-Significant Impact. Construction of the proposed 230 kV transmission line and temporary and permanent work areas would require minor grading activities and result in minor deviations to the existing drainage patterns on site. Limited grading (e.g., surface leveling and gravel installation) would occur at the proposed staging/fly yards and construction areas, including temporary and permanent access roads, as necessary to provide a safe work area and/or safe passage for construction vehicles and equipment. If required, sites would be graded to maintain the natural drainage direction and designed to prevent ponding and erosion. No new impervious surfaces that may affect the natural drainage patterns are being proposed as part of the Proposed Project.

As previously discussed, the Proposed Project would cross conveyances (i.e., culverts) of several potentially jurisdictional features. However, the minor grading involved during construction would not substantially increase the existing velocity or volume of storm water flows either on site or in off-site areas because changes would be minor and subject to compliance with the Construction General Permits BMPs. Further, all temporarily impacted work areas would be returned to pre-construction contours. Additionally, APM HYD-01 would be implemented to design the alignment in such a manner that avoids impacts to jurisdictional aquatic features to the extent possible and to protect all conveyances (i.e., underground culverts) in place during construction activities. SDGE may obtain a permit and mitigate for unavoidable impacts. Thus, impacts would be less than significant.

To maintain pre-construction drainage patterns, SDG&E would implement APM HYD-02, which states that all temporary work areas, including the proposed staging/fly yards, disturbed during grading would be restored to their original contours, and the surrounding area would be restored and repaired as appropriate. Permanent work areas would be designed to maintain existing flow patterns and flow velocities by outsloping and installing rock energy dissipaters as needed. Therefore, the drainage patterns in the Proposed Project Area would return to near pre-construction conditions, and the Proposed Project would not significantly alter the existing, on-site drainage patterns or significantly increase the amount of runoff generated from the site. No net change is expected to occur in the amount of storm water released from the Proposed Project Area, which would preclude off-site soil erosion that may otherwise result. As a result, impacts would be less than significant.

In accordance with the implementation of APM HYD-01, SDG&E would obtain applicable waters permits from the USACE, RWQCB, and/or CDFW if impacts to jurisdictional aquatic features could not be avoided using alternative construction methods. In addition, vegetation removal, restoration, grading, and dust suppression activities would be conducted in accordance with the BMPs outlined in the Proposed Project's SWPPP and SDG&E's existing BMP Manual. These permits and plans would include conditions and BMPs that would be implemented to avoid and minimize impacts to existing drainage patterns, water quality, and hydrology. It is anticipated that one to two 5,000-gallon-capacity water trucks would be utilized during construction for dust-suppression activities. Any encountered groundwater within excavations would be pumped and discharged to an upland location (if permitted) or temporarily stored in Baker tanks located at the staging yards for proper disposal. Typically, encountered groundwater would be pumped to water trucks and used as dust suppression along the access roads. Based on the minor grading activities involved and adherence to applicable permit conditions, as well as SDG&E's BMP Manual, impacts to drainage patterns and subsequent erosion and off-site siltation resulting from construction of the Proposed Project would be less than significant.

Operations and Maintenance

No Impact. O&M of Proposed Project components would not involve any activities that would require the alteration of drainage patterns or the increase of impervious surfaces. Maintenance would be performed by small crews traveling on established access roads. As the Proposed Project would include the installation of toughened glass insulators and braced line post insulators, regular insulator washing is not required as part of O&M. The Proposed Project would not require water sources for O&M activities beyond what is currently being used at the substation. O&M activities may include intermittent dewatering of utility vaults; however, SDG&E would obtain coverage under the Statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Waters of the U.S. (General Order 2014-0174-DWQ) and adhere to the requirements therein to minimize the discharge of pollutants and mitigate for potential erosion. Therefore, no impact would occur.

3.11.3.4.4 Impact HYD-04: In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

Construction, Operations and Maintenance

Less-than-Significant Impact. As previously discussed in Section 3.11.1.4 Flood Conditions, the proposed 230 kV OH segment would cross a portion of the FEMA Zone AE along Harbison

Canyon Road (FEMA 2025). Zone AE corresponds to a 100-year flood zone that is based on the base flood elevation, as determined by detailed flood studies. No other Proposed Project components would cross a designated FEMA Flood Hazard Zone. Because the proposed 230 kV OH segment would span over the relatively narrow area of the Zone AE along Harbison Canyon Road, and no permanent structures would be installed within the flood zone, the risk of release of pollutants due to Project inundation would be less than significant.

3.11.3.4.5 Impact HYD-05: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Construction, Operations and Maintenance

No Impact. The Proposed Project would not conflict with or obstruct implementation of the San Diego Basin Plan nor any sustainable groundwater management plan. During construction of the Proposed Project, BMPs would be implemented to reduce the potential for the discharge of water pollutants in accordance with the statewide CGP and the Basin Plan; thus, no impact to the implementation of the Basin Plan would occur.

As discussed further in Section 3.20 Utilities and Service Systems, construction of the Proposed Project would require the temporary use of water and wastewater facilities by construction workers. Water used for construction activities, such as dust suppression and compaction requirements, would be sourced from Sweetwater Authority or Padre Dam Municipal Water District. Water use for the Proposed Project would be relatively minimal and provided in coordination with the local water agencies. Further, no sustainable groundwater management plan exists for the groundwater basins where the Proposed Project would be located. Thus, no impact would occur.

As stated previously in Section 3.11.3.4.2, O&M of the Proposed Project would not require significant water supplies because the proposed 230 kV transmission line and existing Suncrest Substation would be unmanned and remotely operated. Further, the Proposed Project would include the installation of toughened glass insulators and braced line post insulators; thus, regular insulator washing is not required as part of O&M. The Proposed Project would not require water sources for O&M activities beyond what is currently being used at the substation. O&M activities may include intermittent dewatering of utility vaults; however, SDG&E would obtain coverage under the Statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Waters of the U.S. (General Order 2014-0174-DWQ) and adhere to the requirements therein; thus, no impact would occur.

3.11.4 References

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited October 2025.

CNRA. 2003. Groundwater Basin Boundaries Descriptions – El Cajon Valley. Online. https://data.cnra.ca.gov/dataset/bbd9/resource/8607997a-e1e2-4d68-a48e-b383d403cf54. Site visited May 2025.

CNRA. 2020. Groundwater At a Glance – Hydrologic Region Summaries. Online. https://data.cnra.ca.gov/dataset/calgw_update2020/resource/1187b743-44bb-44b7-aa45-2538e6a1f984. Site visited June 2025.

County of San Diego. 2011. County of San Diego General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html. Site visited October 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited February 2026.

DWR. 2004. Groundwater Basin Boundary Descriptions – Coastal Plain of San Diego Basin. Online. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2016-Basin-Boundary-Descriptions/9_033_CoastalPlainOfSanDiego.pdf. Site visited May 2025.

DWR. 2025a. State Groundwater Management Act (SGMA) Data Viewer. Online. https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels. Site visited June 2025.

DWR. 2025b. Groundwater Basin Prioritization. Online. https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization. Site visited June 2025.

DWR. 2025c. SGMA Basin Prioritization Dashboard. Online. https://gis.water.ca.gov/app/bp-dashboard/final/. Site visited June 2025.

FEMA. 2025. FEMA National Flood Hazard Layer Viewer. Online. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Site visited May 2025.

Insignia. 2026. Suncrest 230 kV Loop-In Project. Preliminary Jurisdictional Delineation Report.

NOAA. 2025. U.S. Climate Normals – Alpine, CA. Online. https://www.ncei.noaa.gov/access/us-climate-normals/#dataset=normals-annualseasonal&timeframe=30&location=CA&station=USC00040136. Site visited May 2025.

Project Clean Water. 2025. Watersheds. Online. https://projectcleanwater.org/watersheds/. Site visited May 2025.

RWQCB San Diego Region. 2021. Water Quality Control Plan for the San Diego Basin. Online. https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/cover_and_title_pgs.pdf. Site visited October 2025.

SDG&E. 2024. Best Management Practices Manual for Water Quality Construction.

SWRCB. 2024. California 2024 Integrated Report Map. Online. https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=f0e4ac76fd0e4a53bebead89339ef3c9. Site visited May 2025.

SWRCB. 2025. Surface Water Quality Assessment Program. Online. https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/. Site visited June 2025.

USACE. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual. Online. http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Ordinary_High_Watermark_Manual_Aug_2008.pdf. Site visited May 2025.

ATTACHMENT 3.11-A: AQUATIC RESOURCES DELINEATION REPORT

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Attachment 3.11-A: Aquatic Resources Delineation Report is included in the Administrative Draft Environmental Impact Report Volume 2.

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ATTACHMENT 3.11-B: HYDROLOGIC FEATURES IN THE PROPOSED PROJECT AREA

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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 1 of 68

Suncrest 230 Kilovolt Loop-In Project

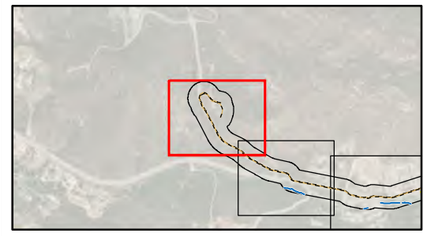
- Survey Area
- Proposed Conventional Pole
- Proposed 230 kV Western UG Segment

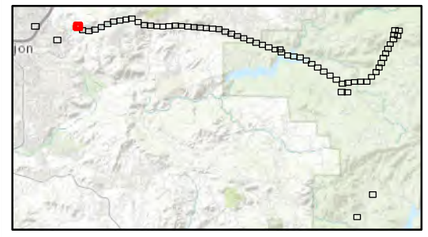
Permanent Component

- Vault

Temporary Component

- Temporary Workspace
- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 2 of 68

Suncrest 230 Kilovolt Loop-In Project

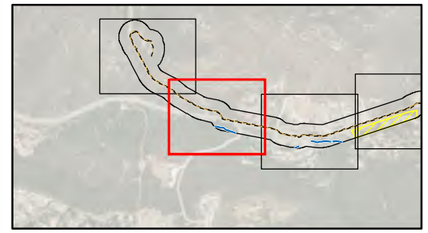
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

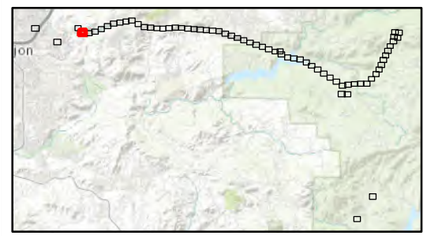
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 3 of 68

Suncrest 230 Kilovolt Loop-In Project

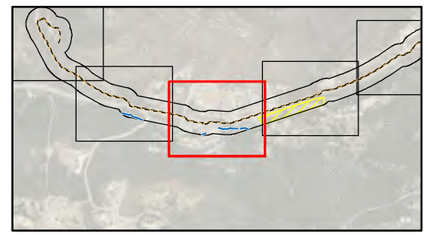
- Survey Area
- Area Not Accessed
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

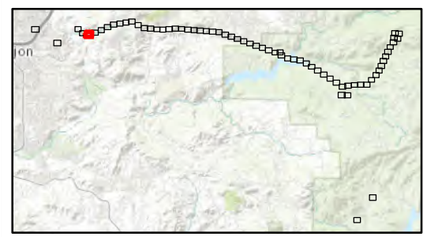
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 4 of 68

Suncrest 230 Kilovolt Loop-In Project

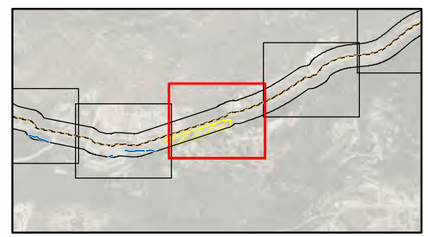
- Survey Area
- Area Not Accessed
- Culvert
- NWI Feature (Freshwater Forested/Shrub Wetland)
- Proposed 230 kV Western UG Segment

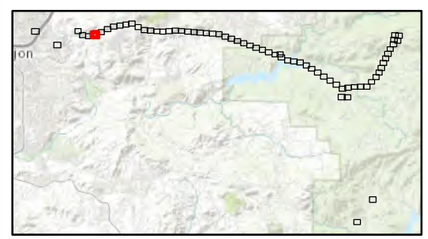
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 5 of 68

Suncrest 230 Kilovolt Loop-In Project

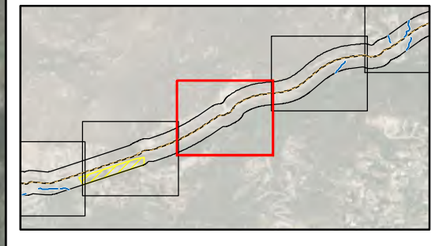
- Survey Area
- Culvert
- Proposed 230 kV Western UG Segment

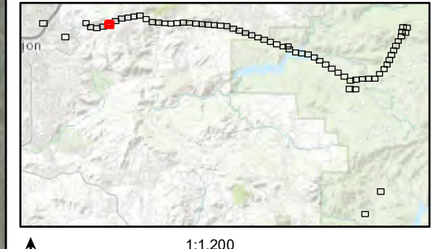
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

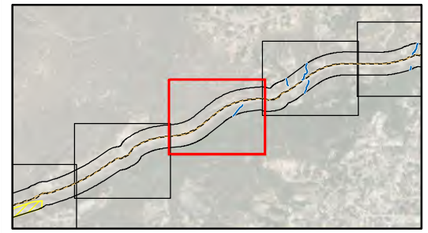
Map 6 of 68

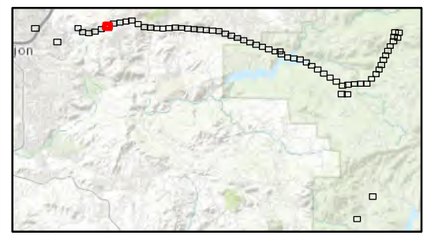
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 7 of 68

Suncrest 230 Kilovolt Loop-In Project

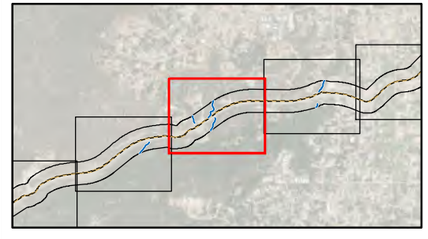
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

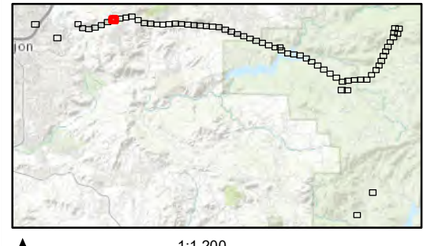
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 8 of 68

Suncrest 230 Kilovolt Loop-In Project

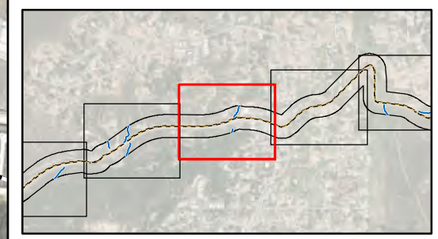
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

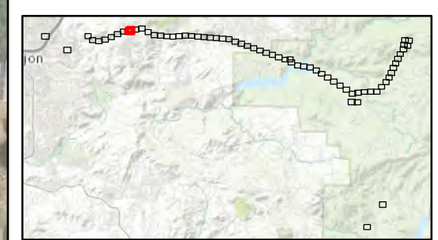
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

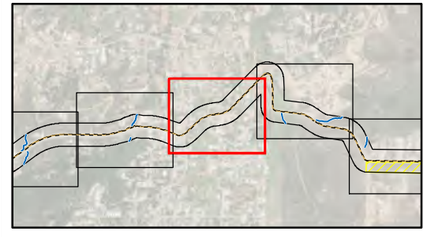
Map 9 of 68

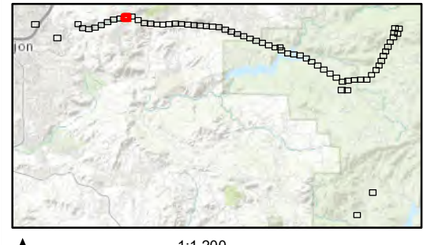
Suncrest 230 Kilovolt Loop-In Project

Survey Area
Proposed 230 kV Western UG Segment

Temporary Component

Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 10 of 68

Suncrest 230 Kilovolt Loop-In Project

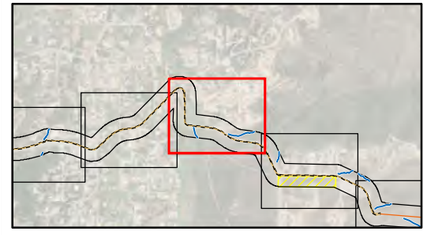
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

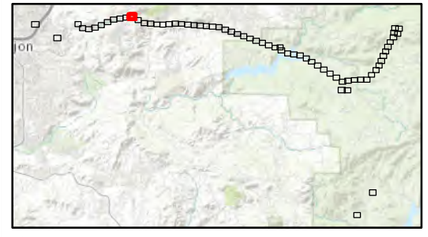
Permanent Component

- Vault

Temporary Component

- Underground Trench





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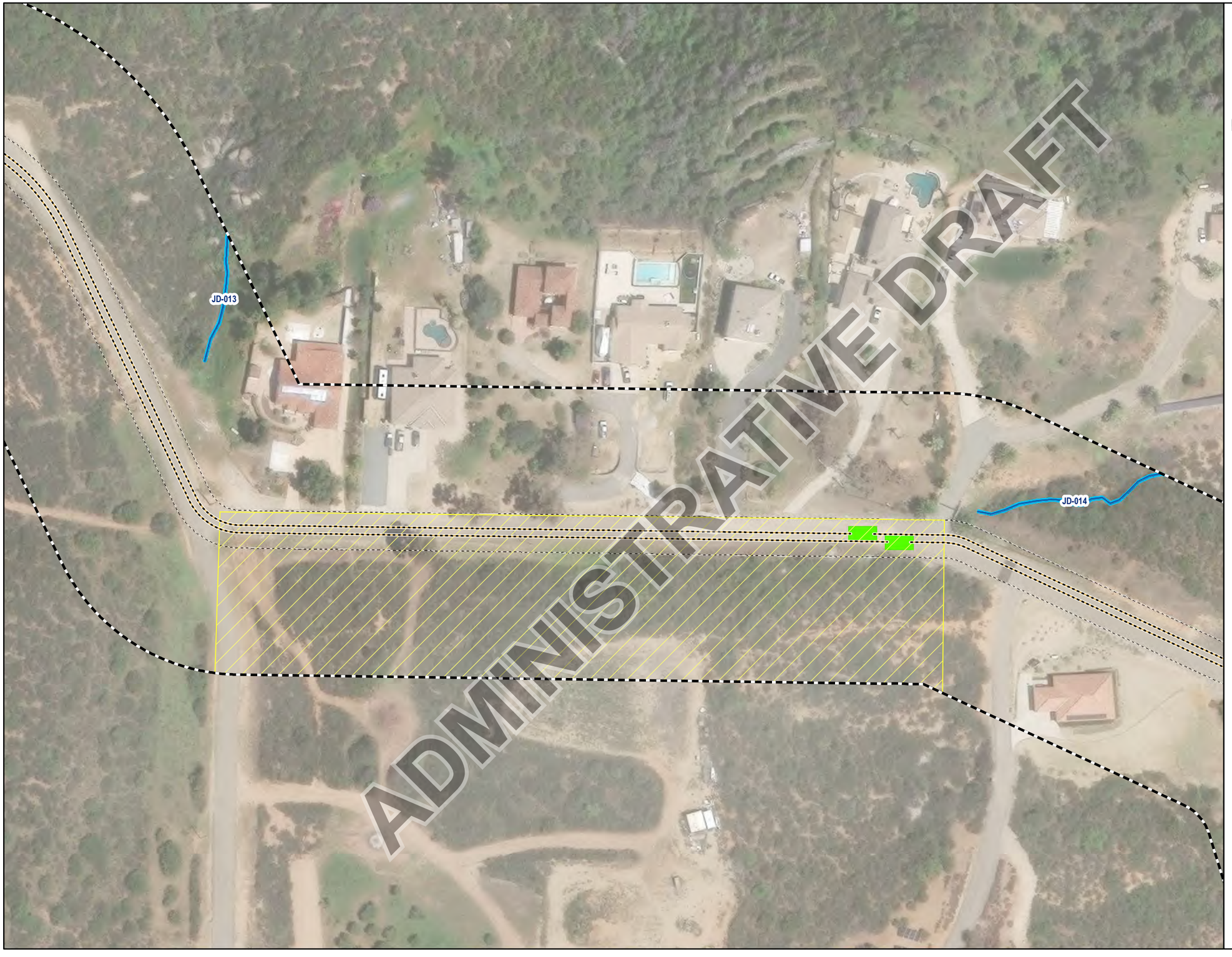

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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 11 of 68

Suncrest 230 Kilovolt Loop-In Project

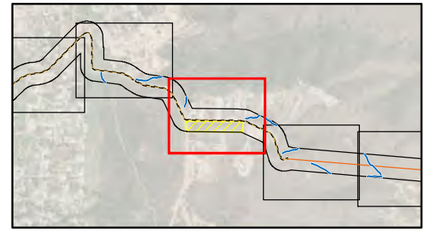
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Western UG Segment

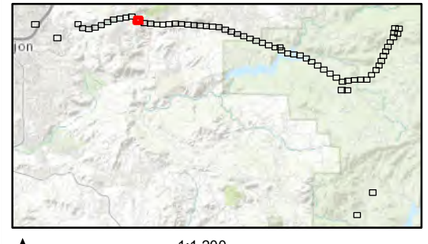
Permanent Component

- Vault

Temporary Component

- Underground Trench





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 12 of 68

Suncrest 230 Kilovolt Loop-In Project

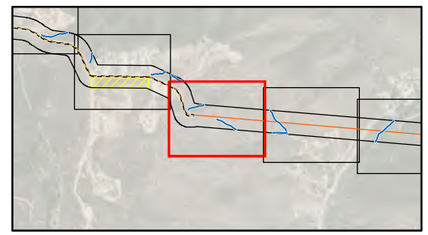
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment

Permanent Component

- Grading
- Pad/Access Road

Temporary Component

- Stringing Site
- Underground Trench



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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 13 of 68

Suncrest 230 Kilovolt Loop-In Project

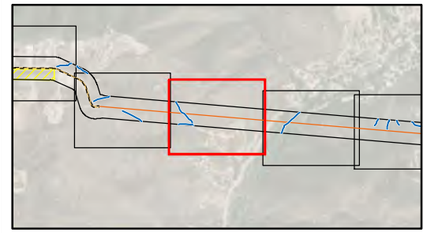
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

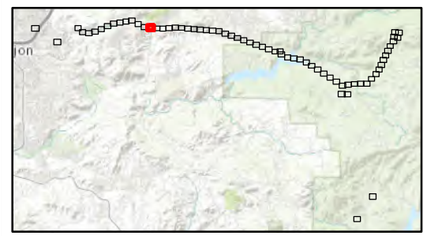
Permanent Component

- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 14 of 68

Suncrest 230 Kilovolt Loop-In Project

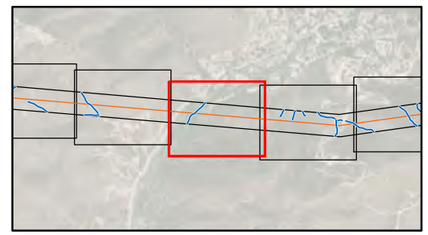
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

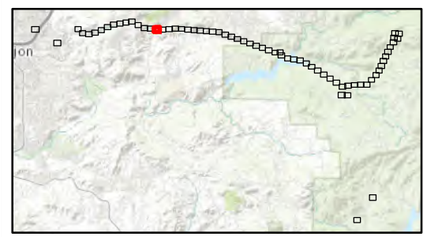
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace





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JD-021
JD-022
JD-023
JD-024
JD-025
JD-026
(4) Tangent
(5) Terminal Dead-End

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 15 of 68

Suncrest 230 Kilovolt Loop-In Project

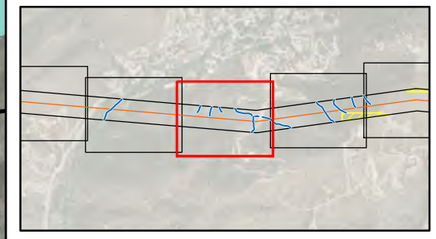
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

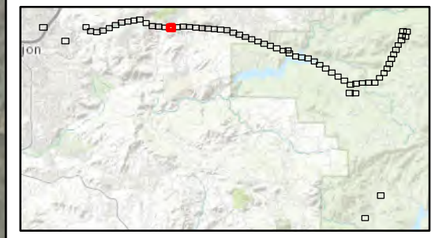
Permanent Component

- Helicopter Landing
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 16 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

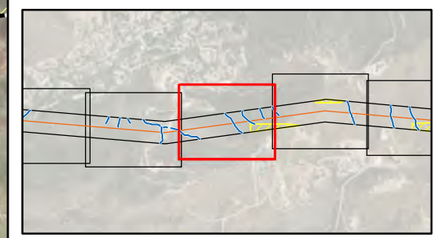
Permanent Component

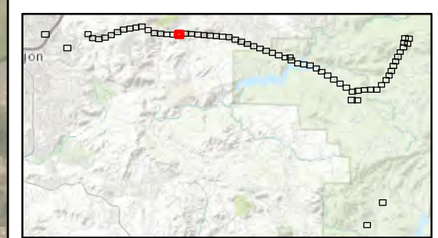
- Helicopter Landing
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 17 of 68

Suncrest 230 Kilovolt Loop-In Project

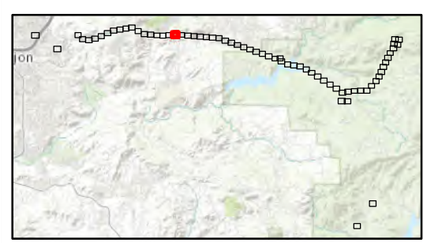
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



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SDGE

ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 18 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

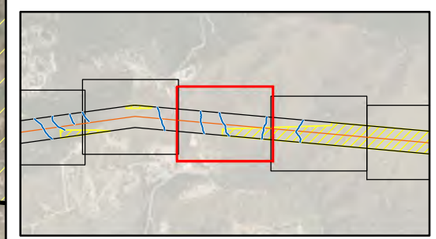
Permanent Component

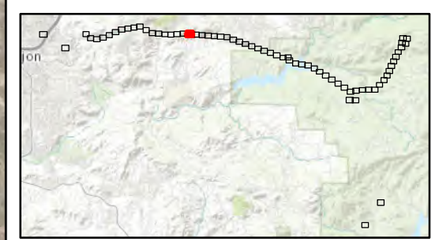
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 19 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

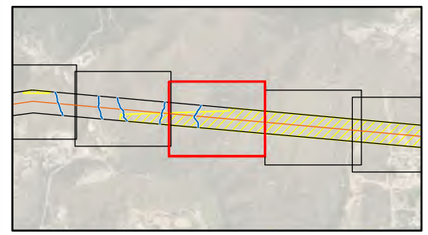
Permanent Component

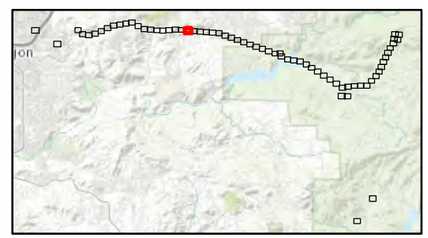
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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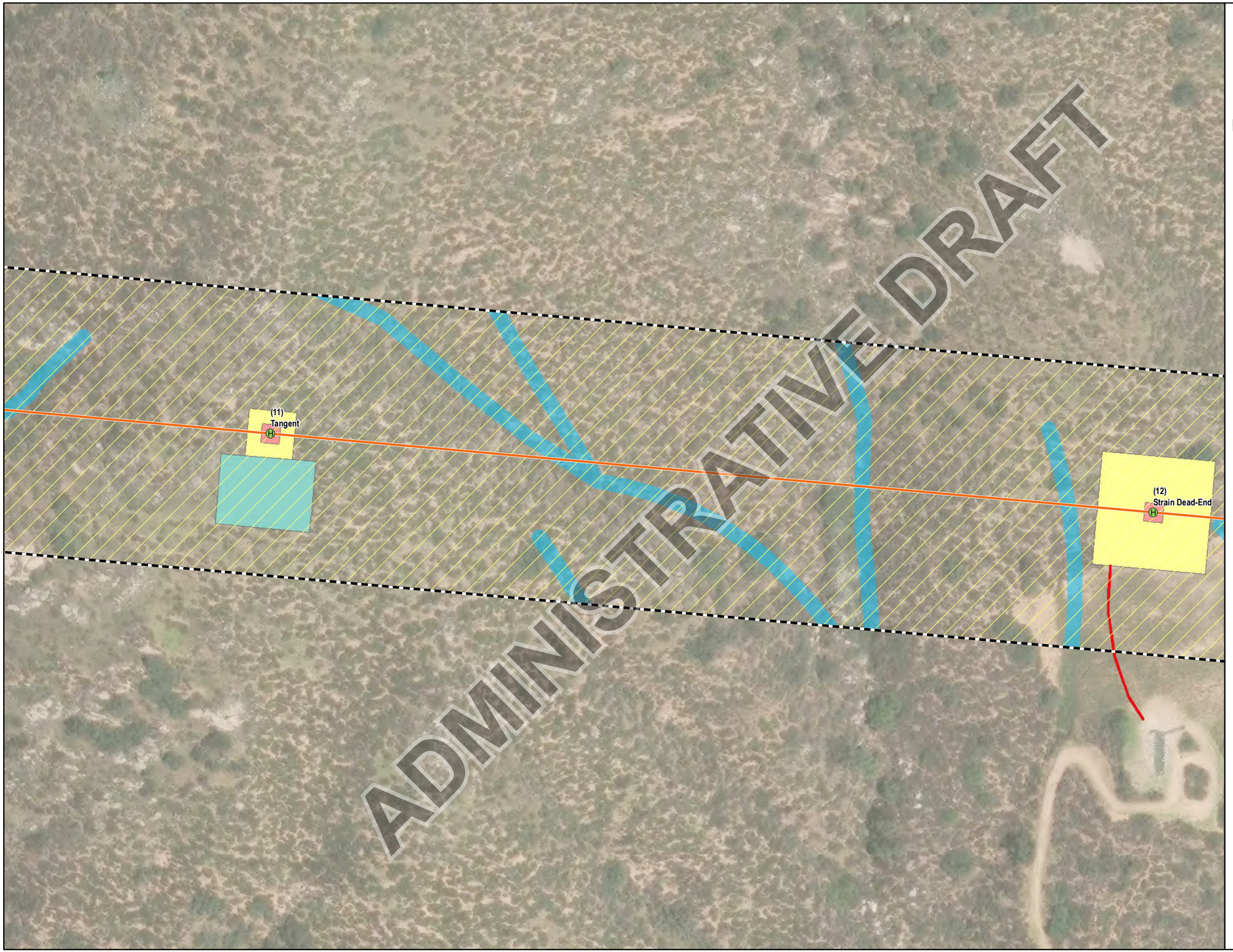


Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 20 of 68

Suncrest 230 Kilovolt Loop-In Project

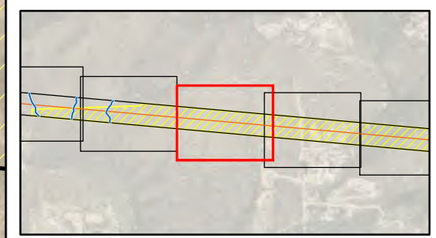
- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

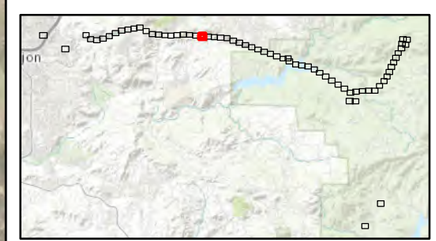
Permanent Component

- Helicopter Landing
- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace





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SDGE

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 21 of 68

Suncrest 230 Kilovolt Loop-In Project

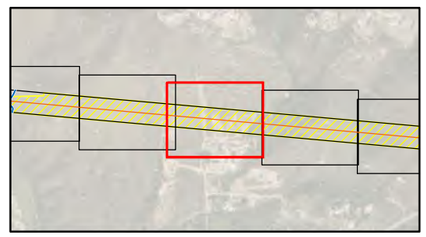
- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

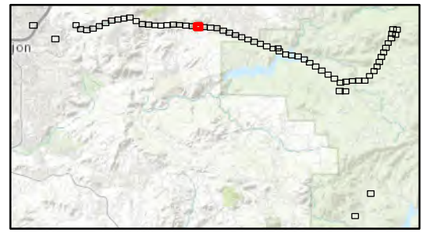
Permanent Component

- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 22 of 68

Suncrest 230 Kilovolt Loop-In Project

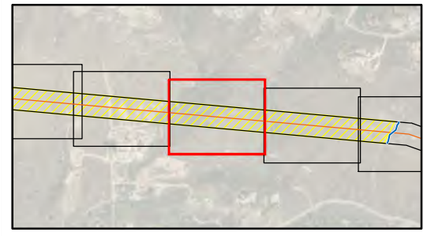
- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

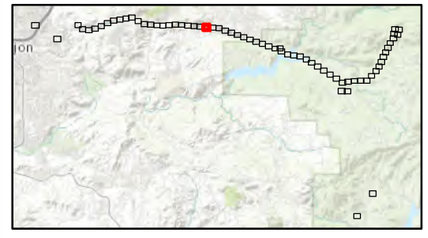
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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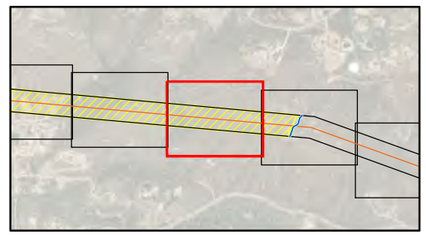
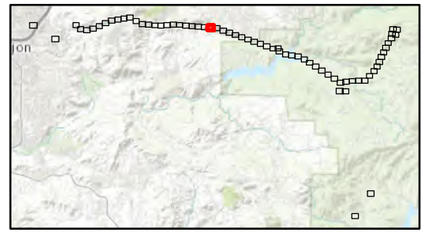
Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 23 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed 230 kV OH Segment





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 24 of 68

Suncrest 230 Kilovolt Loop-In Project

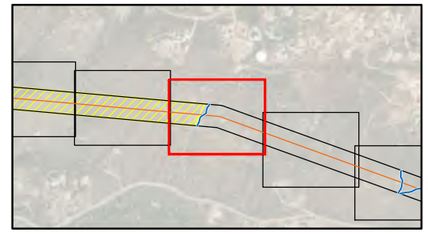
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

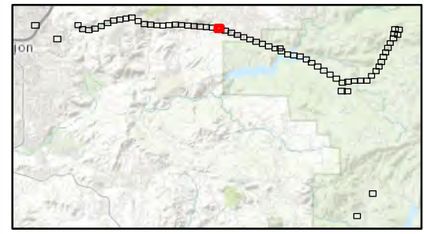
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 25 of 68

Suncrest 230 Kilovolt Loop-In Project

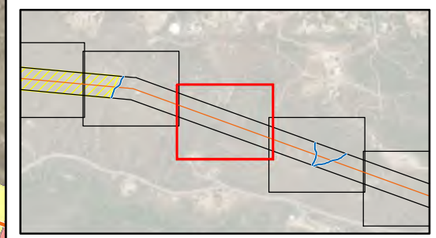
Survey Area
Proposed 230 kV OH Segment

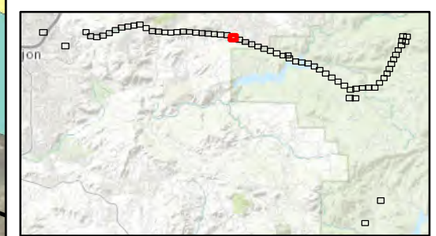
Permanent Component

Helicopter Landing
Pad/Access Road

Temporary Component

Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 26 of 68

Suncrest 230 Kilovolt Loop-In Project

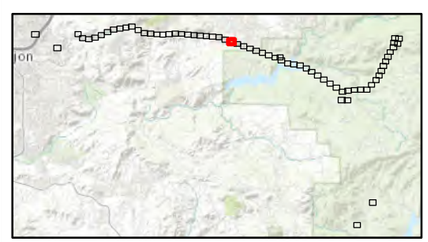
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 27 of 68

Suncrest 230 Kilovolt Loop-In Project

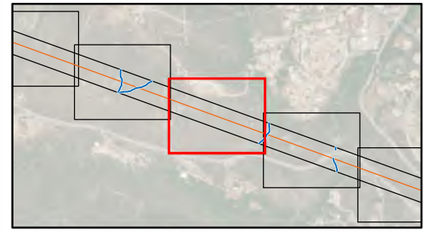
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

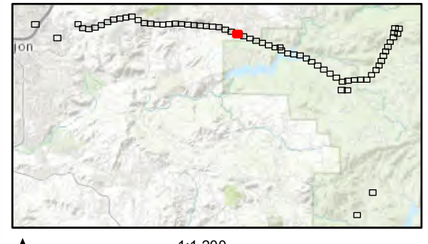
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 28 of 68

Suncrest 230 Kilovolt Loop-In Project

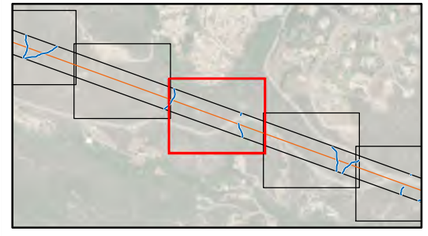
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

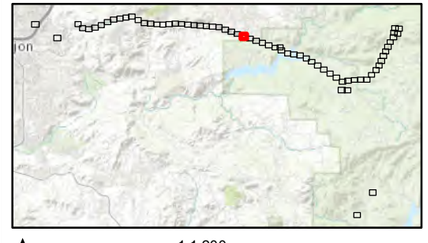
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace





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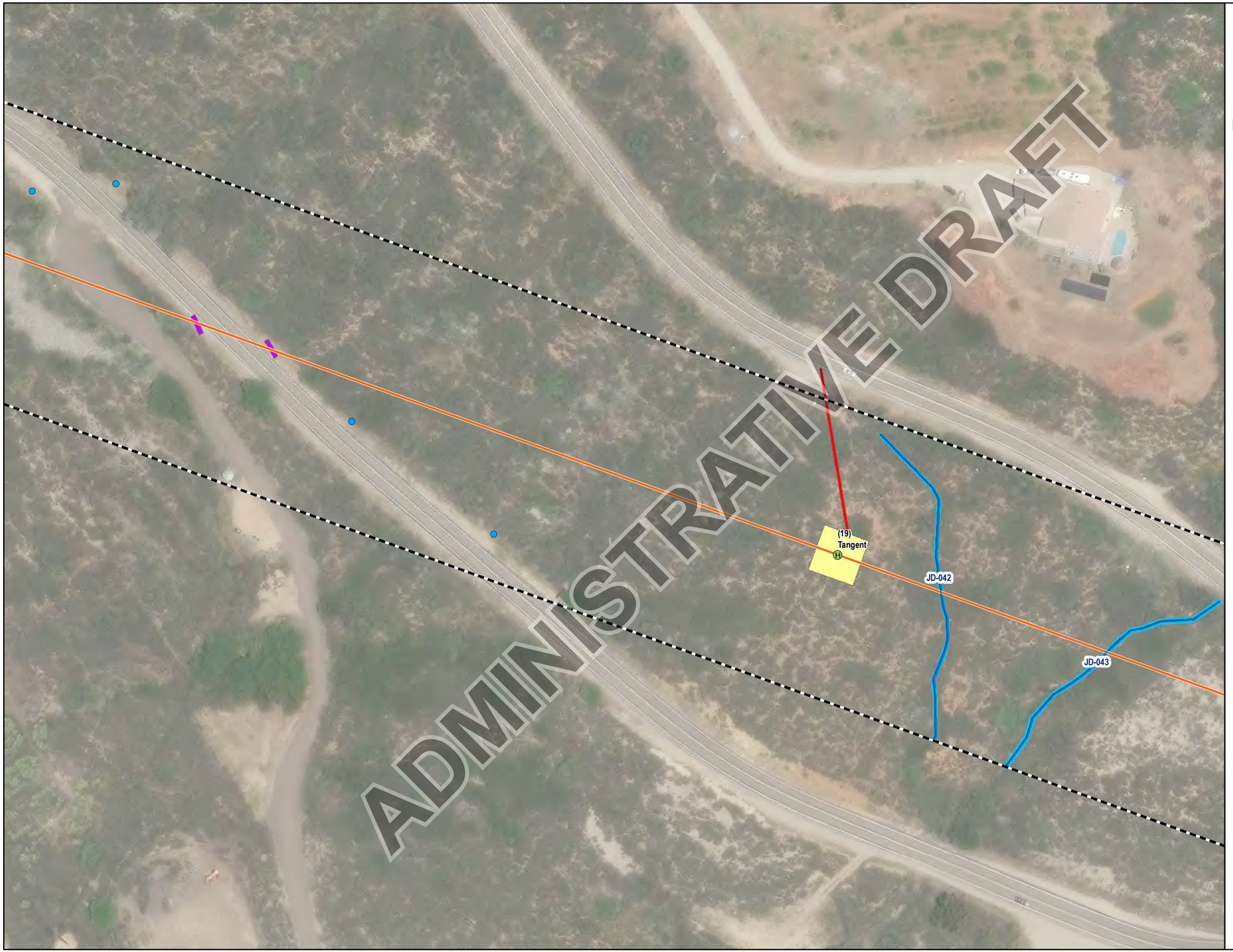


ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 29 of 68

Suncrest 230 Kilovolt Loop-In Project

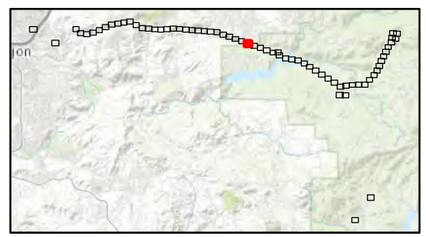
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Permanent Component

- New Footpath
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace



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0 100 200 Feet

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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 30 of 68

Suncrest 230 Kilovolt Loop-In Project

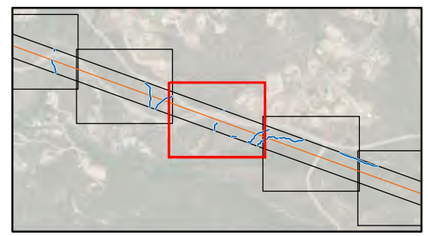
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

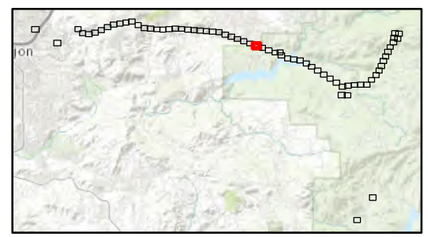
Permanent Component

- Drainage Swale
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace





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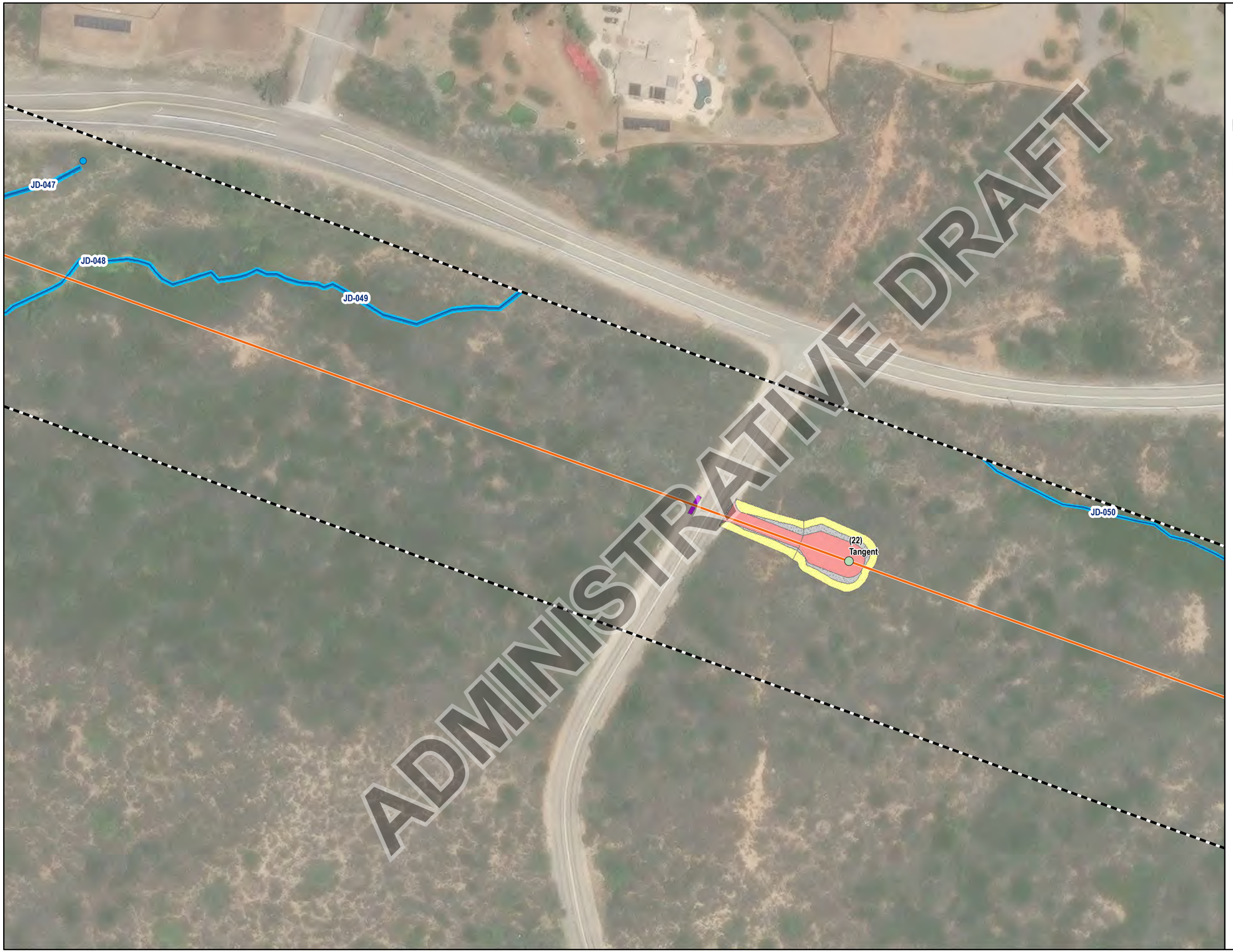


Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 31 of 68

Suncrest 230 Kilovolt Loop-In Project

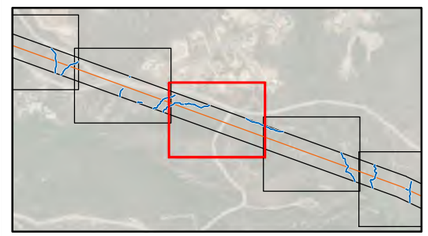
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

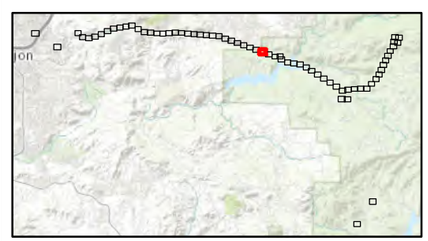
Permanent Component

- Grading
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace





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0 100 200 Feet

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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 32 of 68

Suncrest 230 Kilovolt Loop-In Project

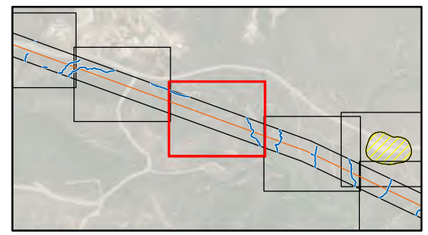
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace



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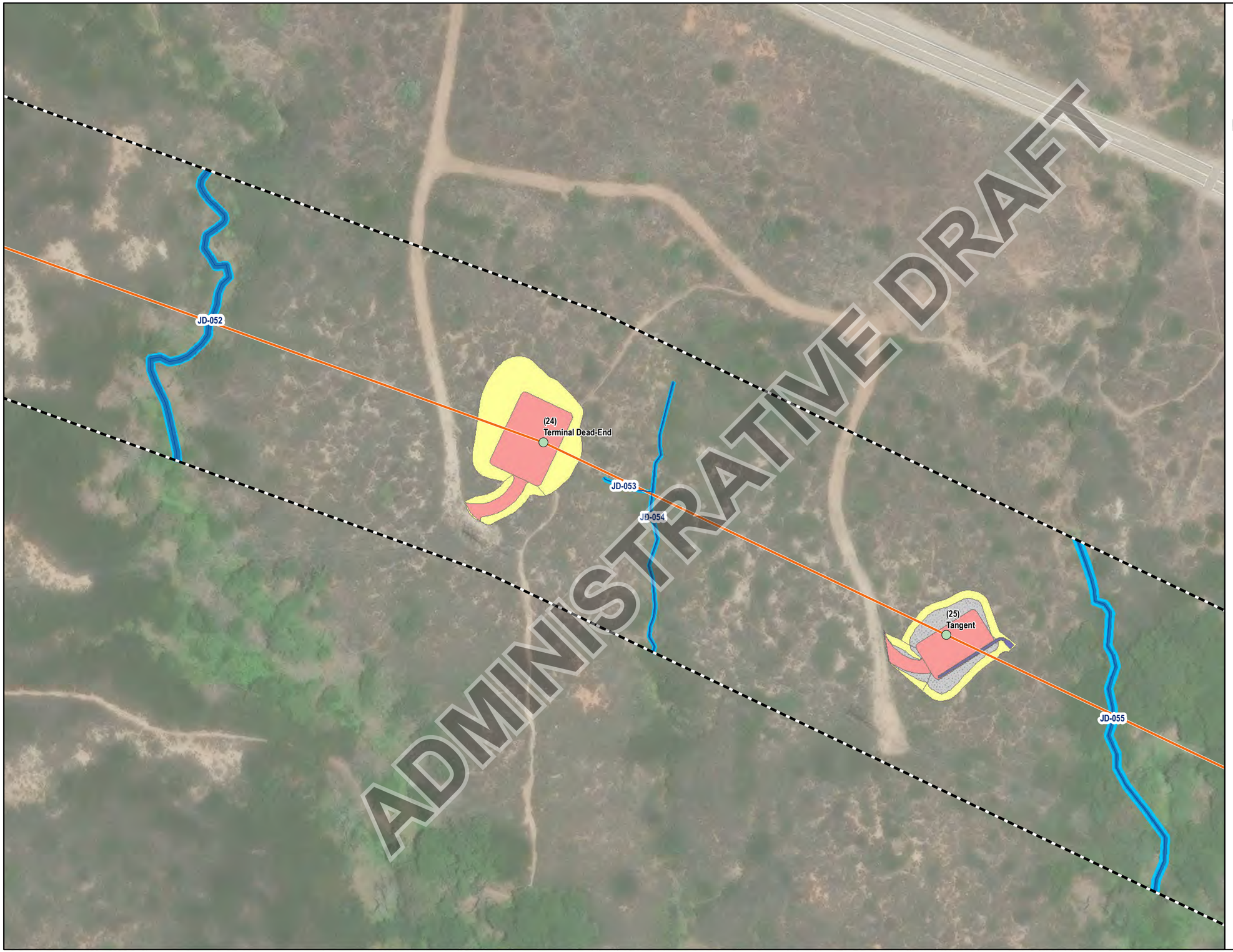

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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 33 of 68

Suncrest 230 Kilovolt Loop-In Project

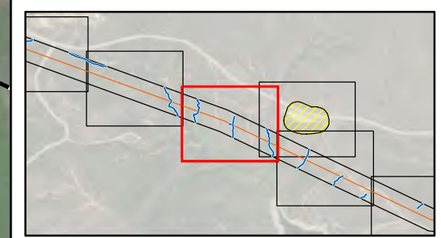
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

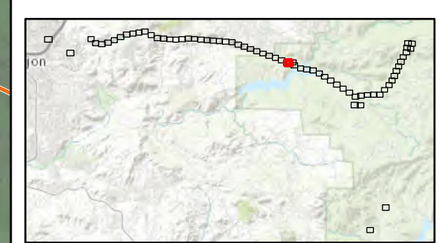
Permanent Component

- Drainage Swale
- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 34 of 68

Suncrest 230 Kilovolt Loop-In Project

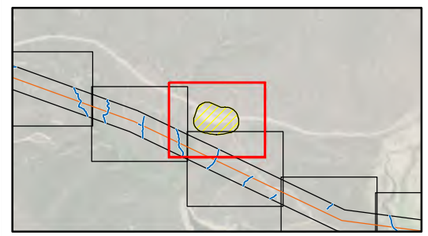
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment

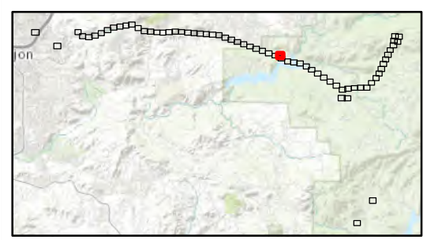
Permanent Component

- Drainage Swale
- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace
- Staging Yard/Fly Yard





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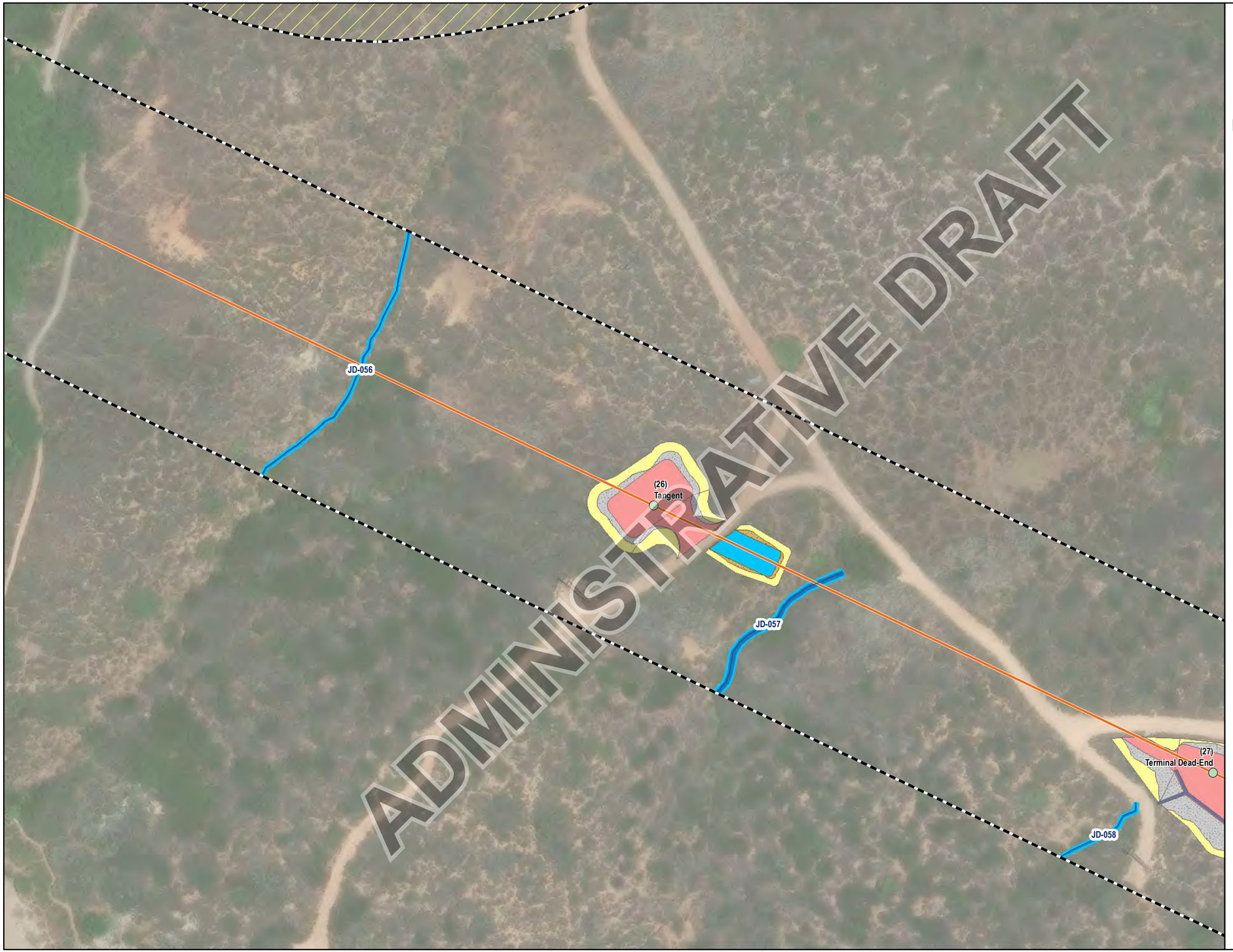


ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 35 of 68

Suncrest 230 Kilovolt Loop-In Project

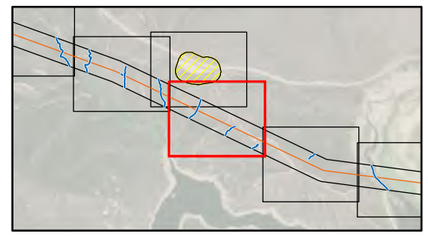
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

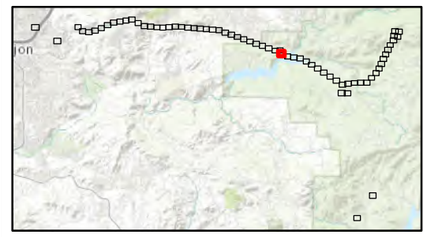
Permanent Component

- Drainage Swale
- Grading
- Pad/Access Road

Temporary Component

- Grading
- Stringing Site
- Temporary Workspace





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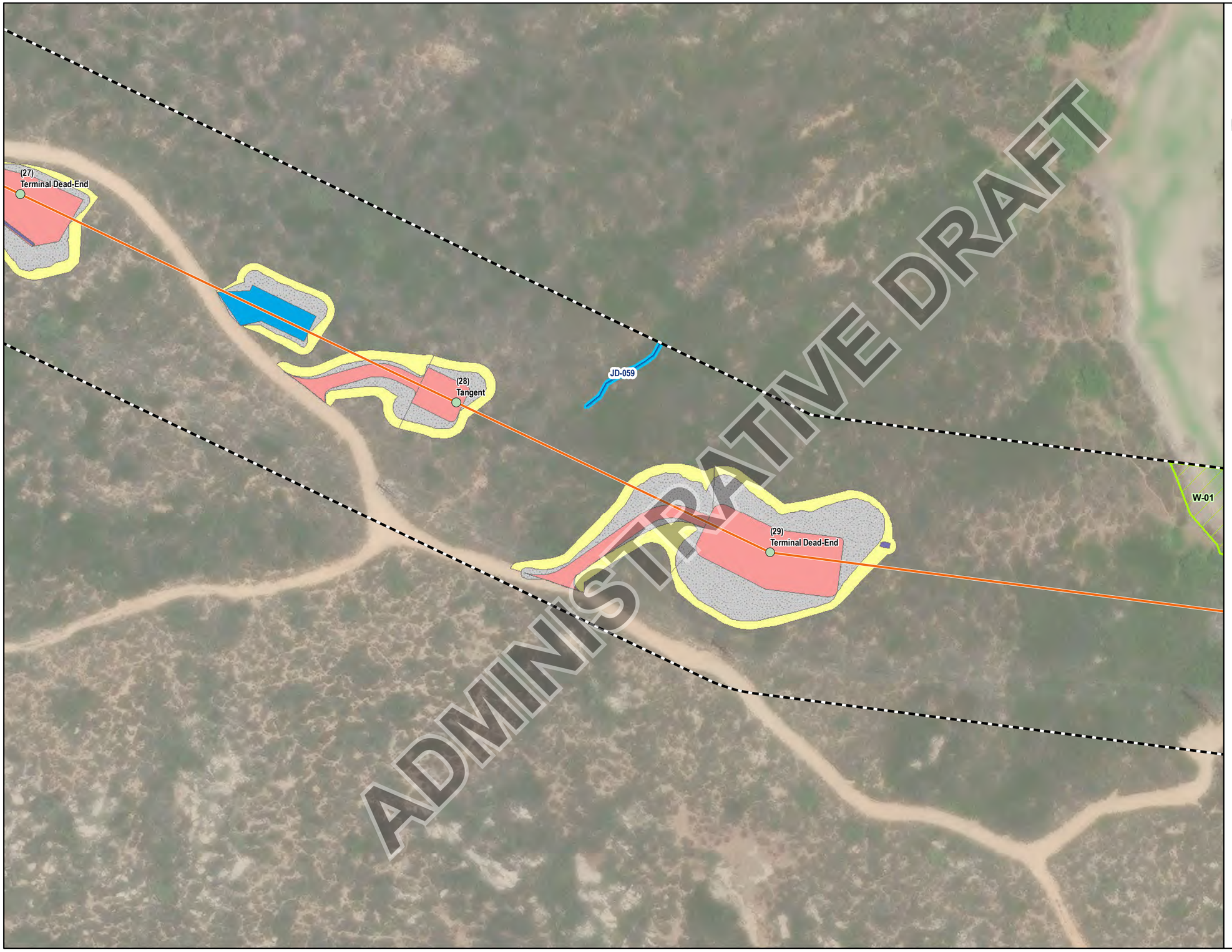


Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 36 of 68

Suncrest 230 Kilovolt Loop-In Project

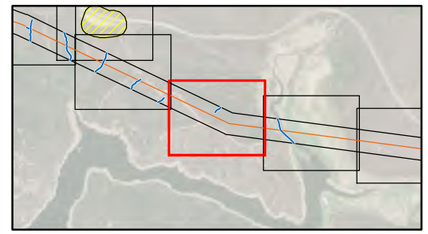
- Survey Area
- Feature Centerline
- Potential Wetland
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

Permanent Component

- Drainage Swale
- Grading
- Pad/Access Road
- Stringing Site

Temporary Component

- Temporary Workspace



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SDGE

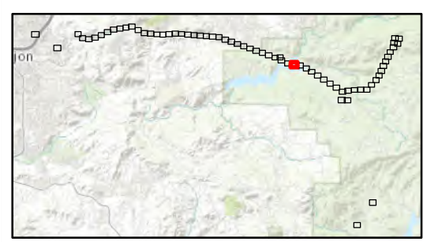
ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 37 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Potential Wetland
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment



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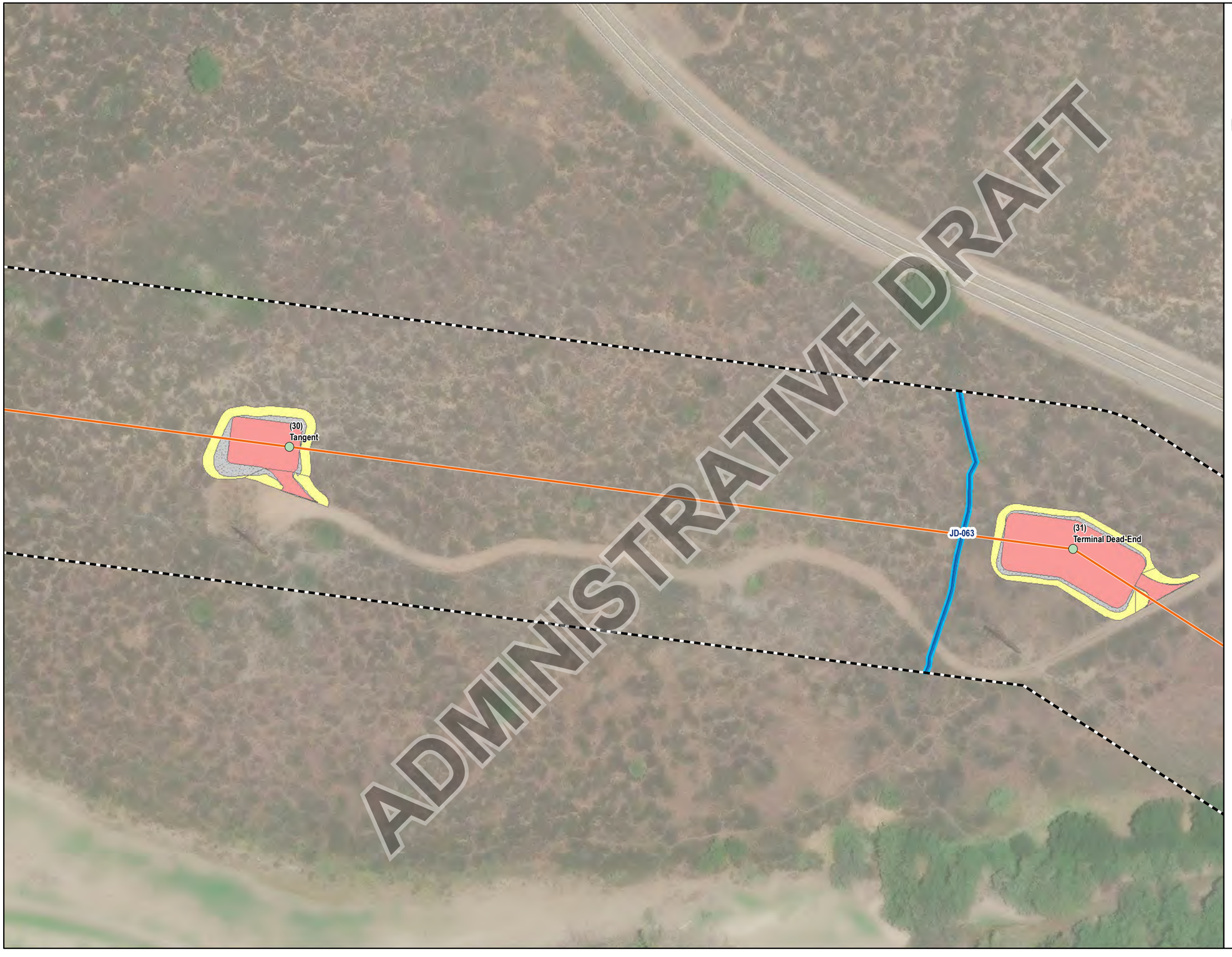


ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 38 of 68

Suncrest 230 Kilovolt Loop-In Project

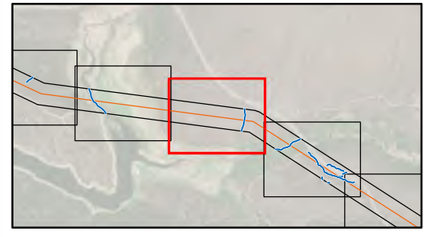
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

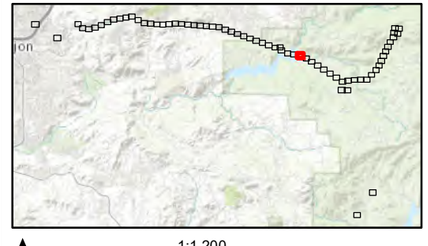
Permanent Component

- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace





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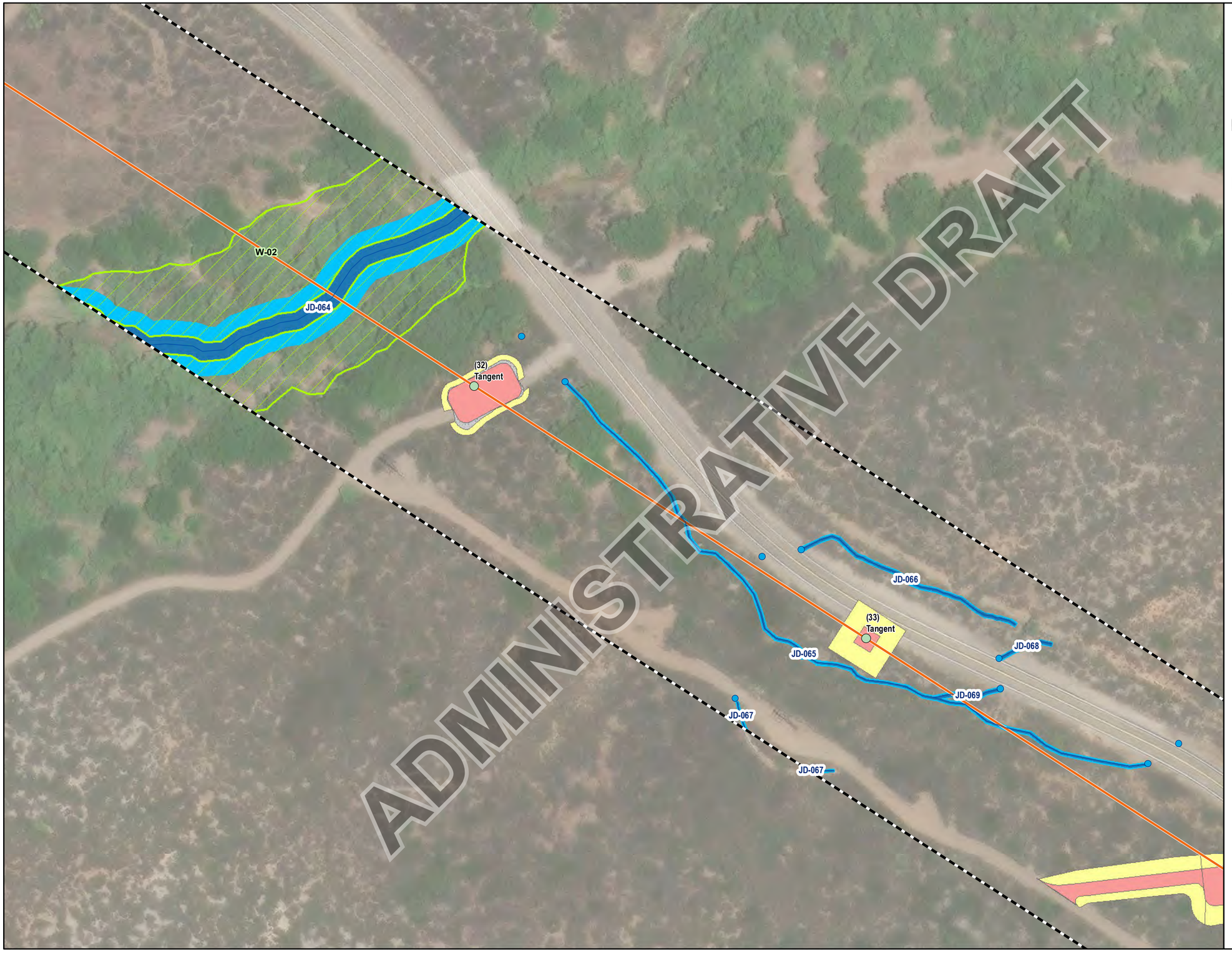


Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 39 of 68

Suncrest 230 Kilovolt Loop-In Project

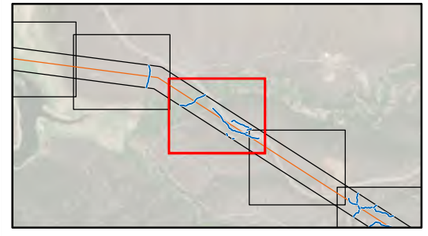
- Survey Area
- Culvert
- Feature Centerline
- Potential Wetland
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

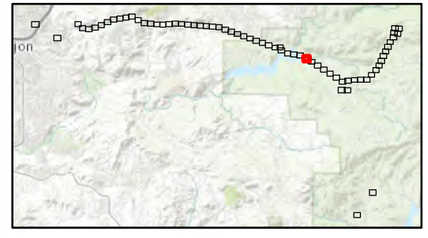
Permanent Component

- Grading
- Pad/Access Road

Temporary Component

- Temporary Workspace





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 40 of 68

Suncrest 230 Kilovolt Loop-In Project

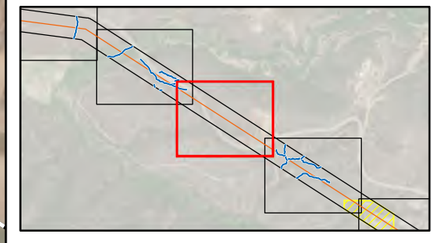
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

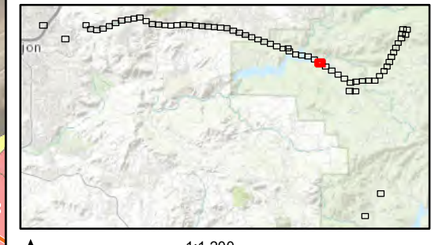
Permanent Component

- Grading
- Pad/Access Road
- RipRap

Temporary Component

- Guard Structure
- Temporary Workspace





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 41 of 68

Suncrest 230 Kilovolt Loop-In Project

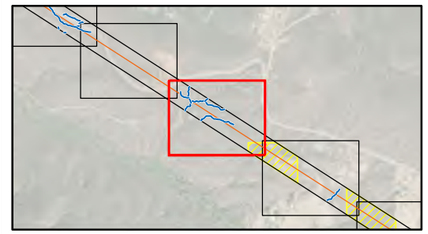
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

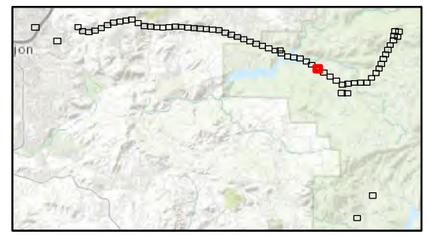
Permanent Component

- Helicopter Landing
- Pad/Access Road
- RipRap

Temporary Component

- Guard Structure
- Temporary Workspace





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 42 of 68

Suncrest 230 Kilovolt Loop-In Project

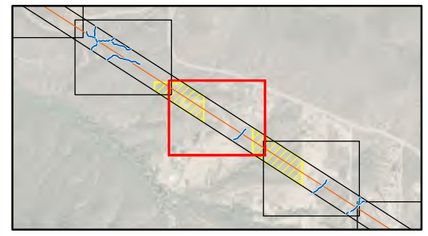
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

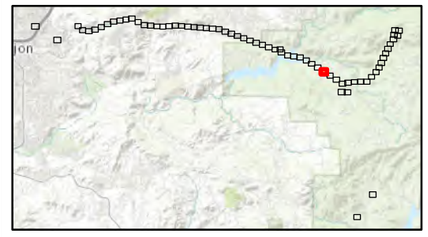
Permanent Component

- Drainage Swale
- Pad/Access Road

Temporary Component

- Temporary Workspace





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 43 of 68

Suncrest 230 Kilovolt Loop-In Project

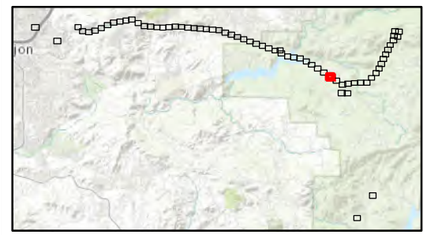
- Survey Area
- Area Not Accessed
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

Permanent Component

- Pad/Access Road

Temporary Component

- Temporary Workspace



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SDGE

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 44 of 68

Suncrest 230 Kilovolt Loop-In Project

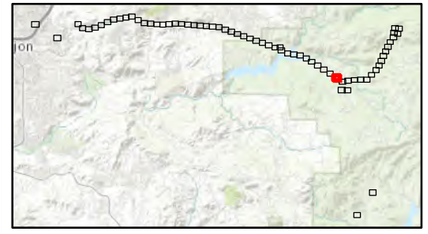
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

Permanent Component

- New Footpath
- Pad/Access Road

Temporary Component

- Temporary Workspace



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SDGE

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 45 of 68

Suncrest 230 Kilovolt Loop-In Project

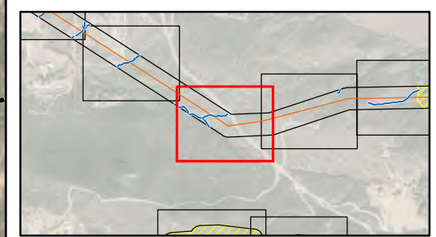
- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

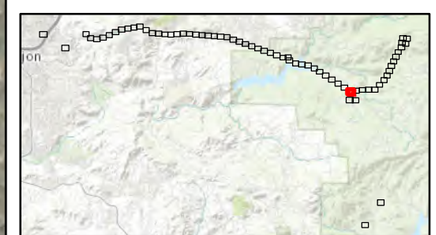
Permanent Component

- Grading
- New Footpath
- Pad/Access Road

Temporary Component

- Guard Structure
- Temporary Workspace





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SDGE

ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 46 of 68

Suncrest 230 Kilovolt Loop-In Project

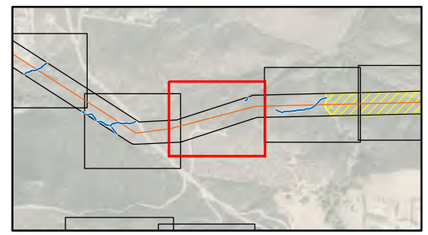
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed Conventional Pole
- Proposed 230 kV OH Segment

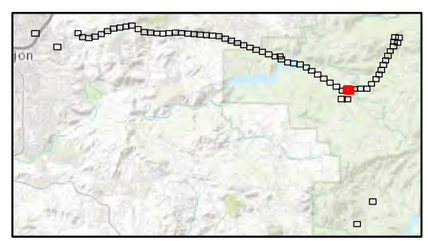
Permanent Component

- Drainage Swale
- Grading
- Helicopter Landing
- Pad/Access Road

Temporary Component

- Grading
- Stringing Site
- Temporary Workspace





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SDGE

ADMINISTRATIVE DRAFT

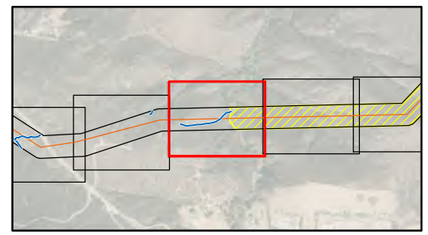
Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

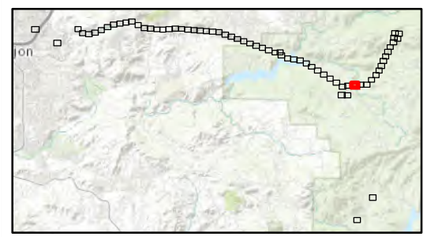
Map 47 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed 230 kV OH Segment

Note: Drainages extending into non-surveyed areas were extrapolated from imagery.





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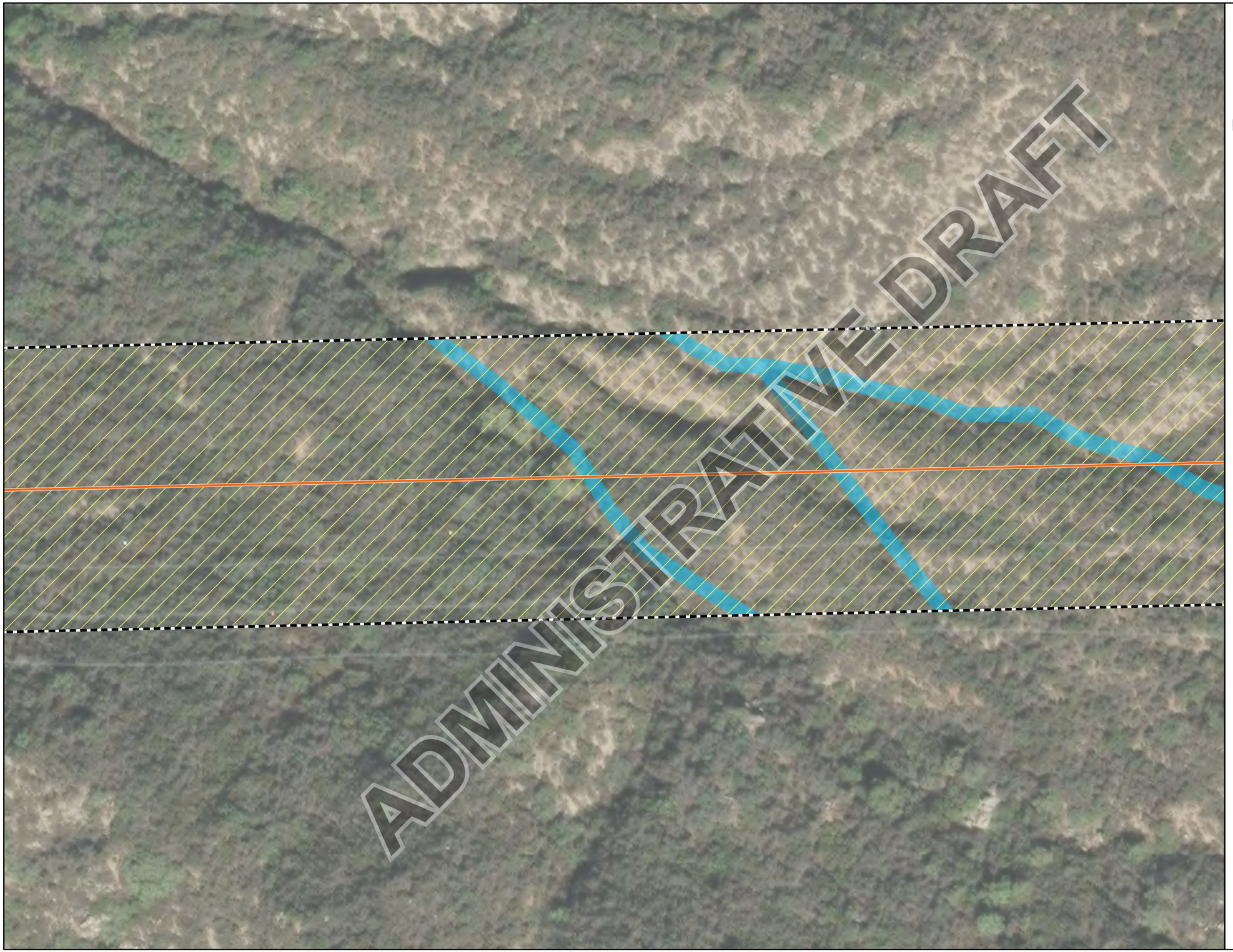
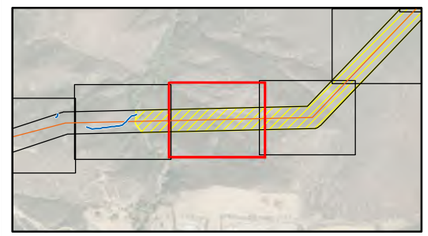


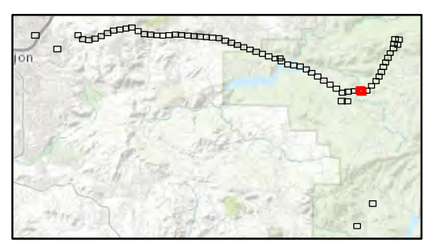
Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 48 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed 230 kV OH Segment





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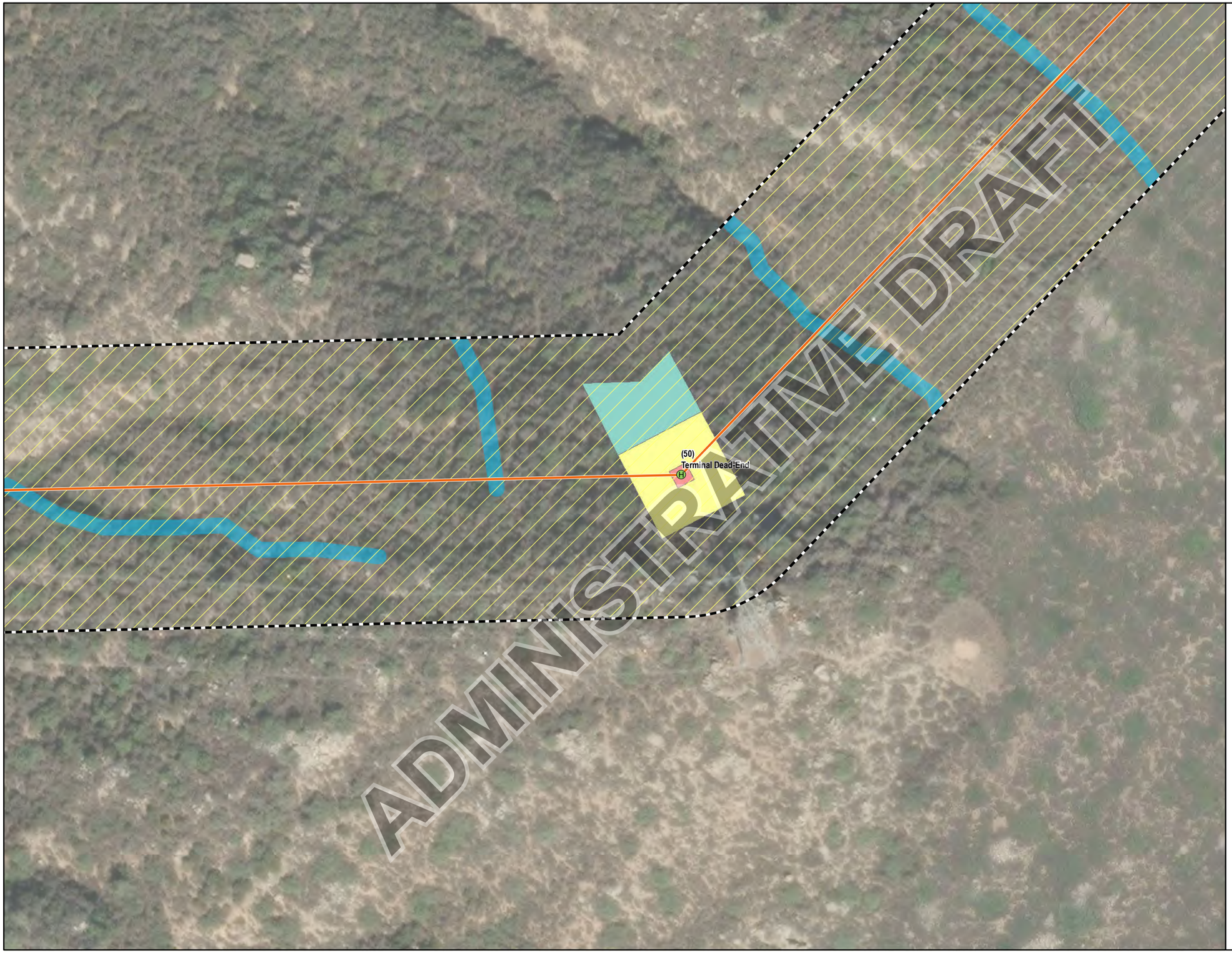


Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 49 of 68

Suncrest 230 Kilovolt Loop-In Project

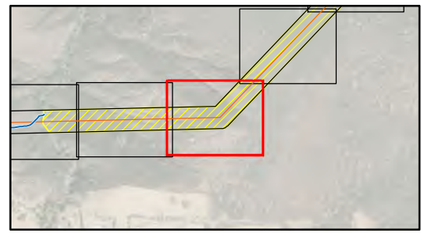
- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

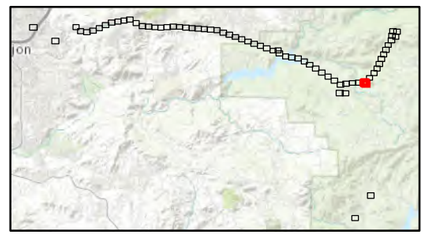
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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SDGE

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 50 of 68

Suncrest 230 Kilovolt Loop-In Project

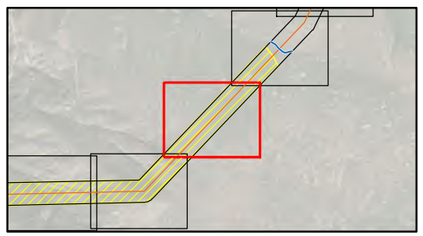
- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

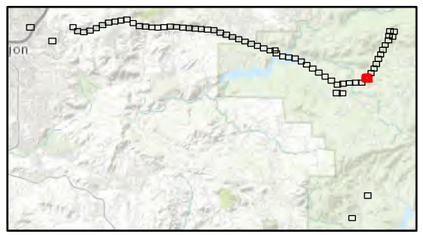
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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0 100 200 Feet

SDGE

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 51 of 68

Suncrest 230 Kilovolt Loop-In Project

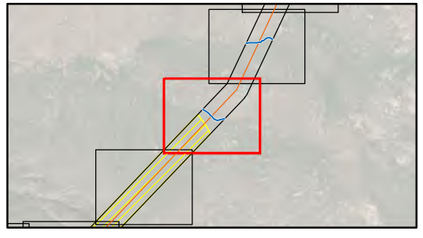
- Survey Area
- Area Not Accessed
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- NWI Feature (Riverine)
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

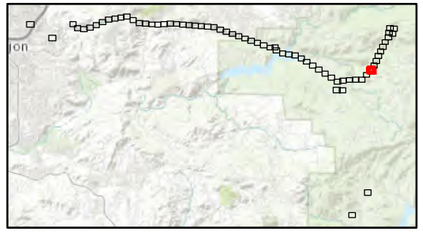
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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SDGE

ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

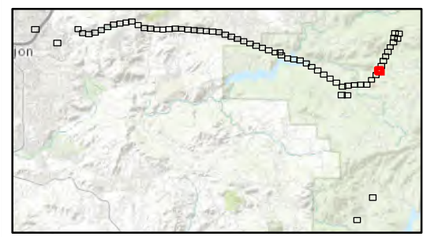
Map 52 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment

Permanent Component

- Helicopter Landing



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0 100 200 Feet

SDGE

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 53 of 68

Suncrest 230 Kilovolt Loop-In Project

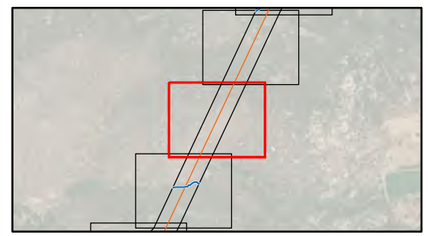
- Survey Area
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

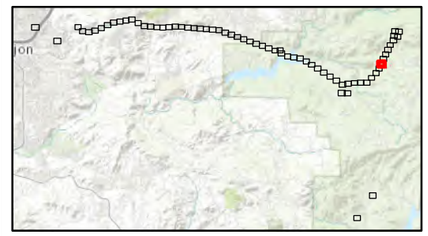
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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0 100 200 Feet

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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 54 of 68

Suncrest 230 Kilovolt Loop-In Project

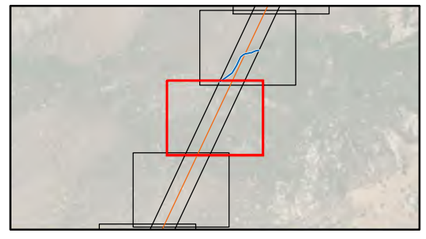
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

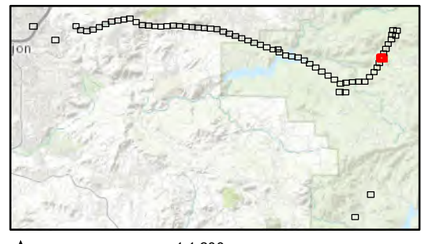
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 55 of 68

Suncrest 230 Kilovolt Loop-In Project

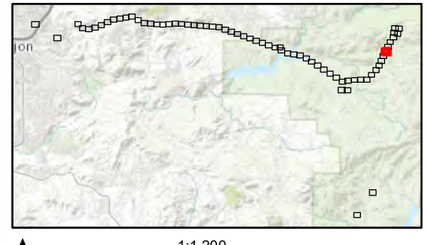
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV OH Segment

Permanent Component

- Helicopter Landing

Temporary Component

- Temporary Workspace



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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 56 of 68

Suncrest 230 Kilovolt Loop-In Project

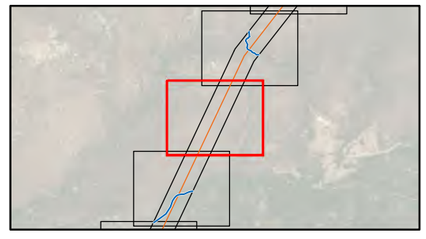
- Survey Area
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

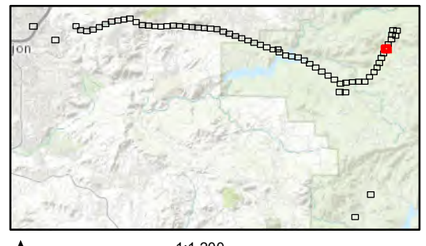
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 57 of 68

Suncrest 230 Kilovolt Loop-In Project

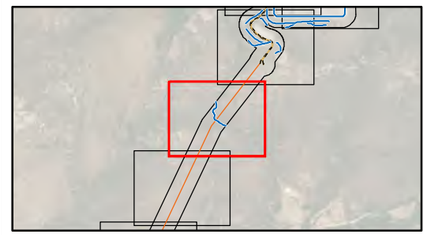
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Helicopter Pole
- Proposed 230 kV OH Segment

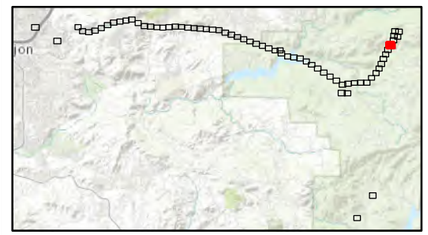
Permanent Component

- Helicopter Landing
- Pad/Access Road

Temporary Component

- Temporary Workspace





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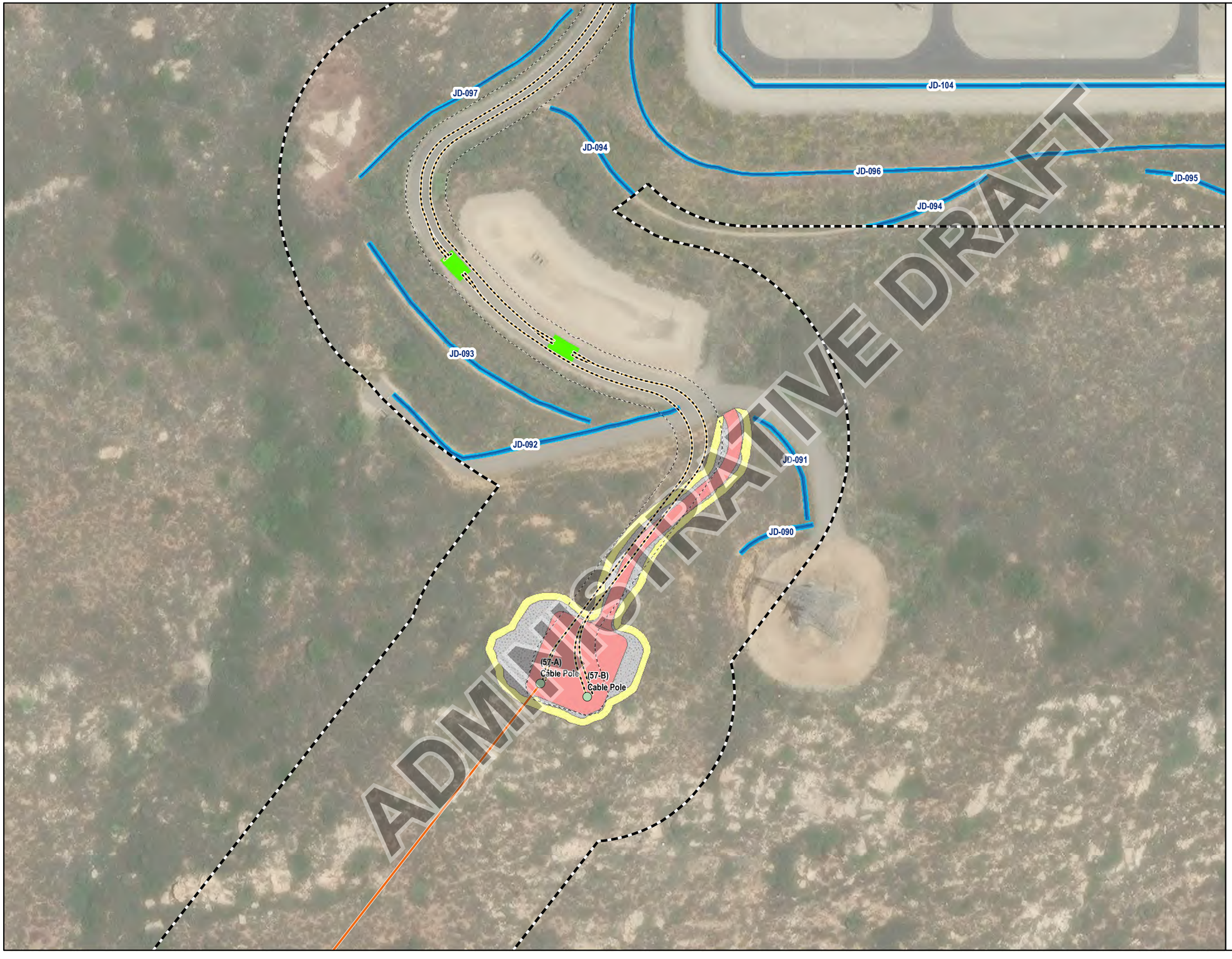


Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 58 of 68

Suncrest 230 Kilovolt Loop-In Project

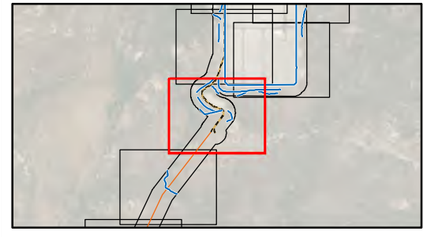
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed Conventional Pole
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment

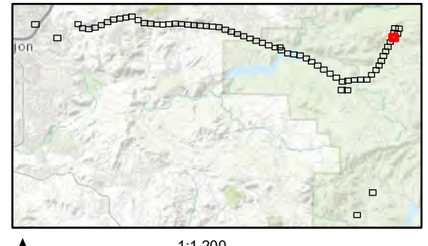
Permanent Component

- Grading
- Pad/Access Road
- Vault

Temporary Component

- Temporary Workspace
- Underground Trench





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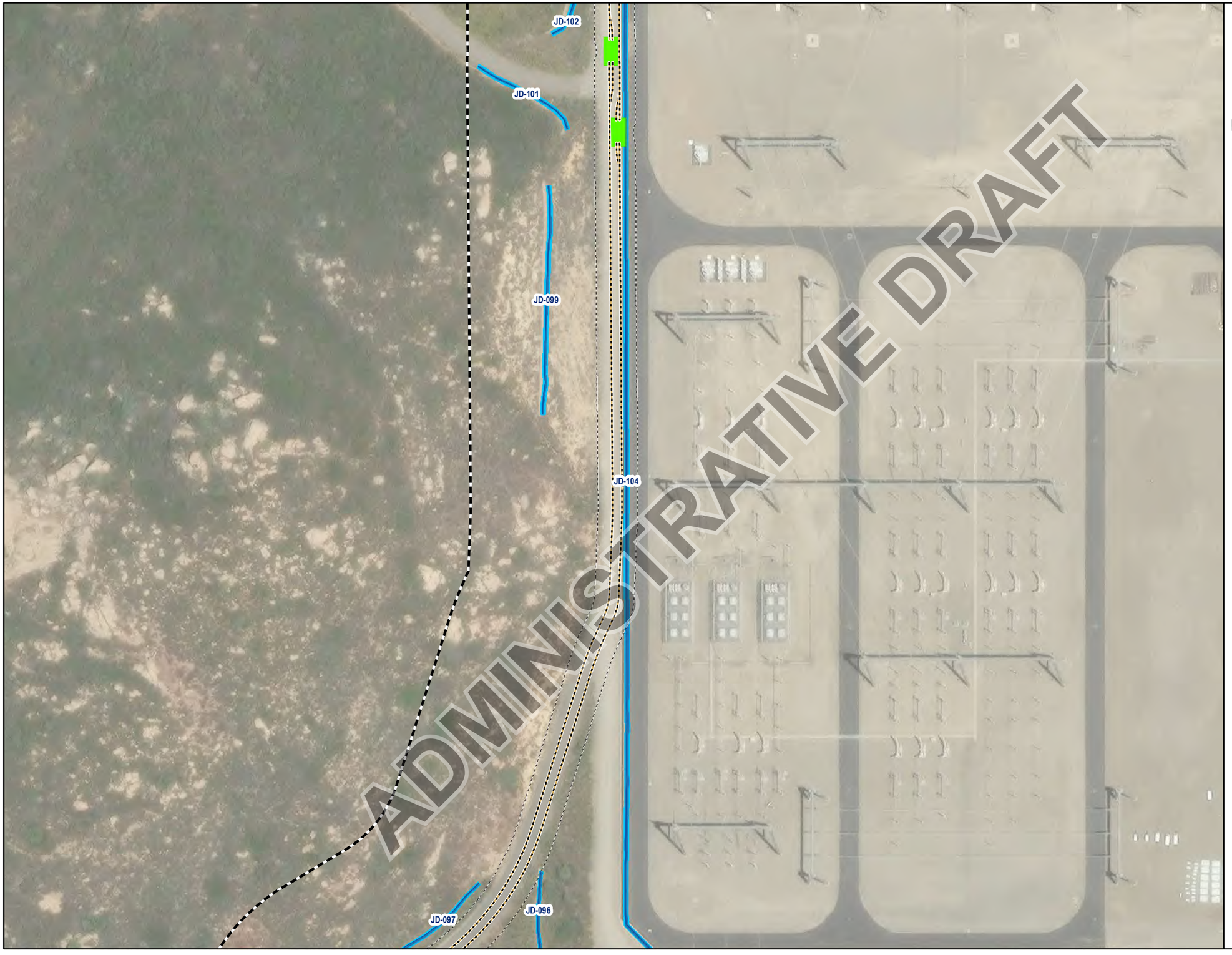


ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 59 of 68

Suncrest 230 Kilovolt Loop-In Project

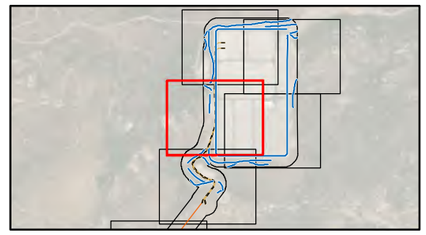
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Eastern UG Segment

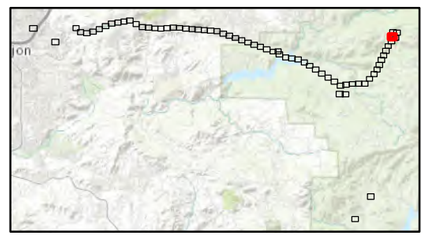
Permanent Component

- Vault

Temporary Component

- Underground Trench





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 60 of 68

Suncrest 230 Kilovolt Loop-In Project

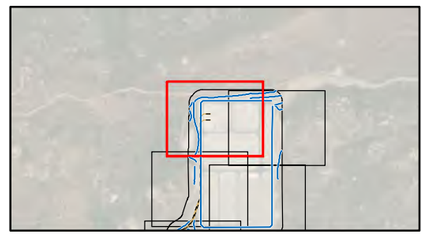
- Survey Area
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank
- Proposed 230 kV Eastern UG Segment

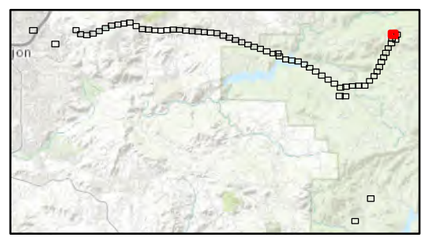
Permanent Component

- Vault

Temporary Component

- Underground Trench





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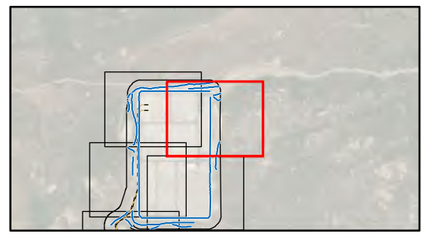
ADMINISTRATIVE DRAFT

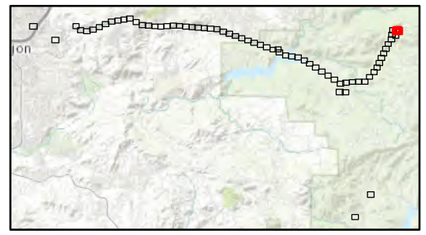
Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 61 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank





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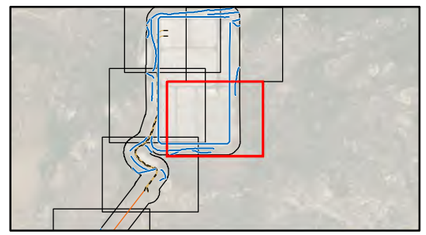
ADMINISTRATIVE DRAFT

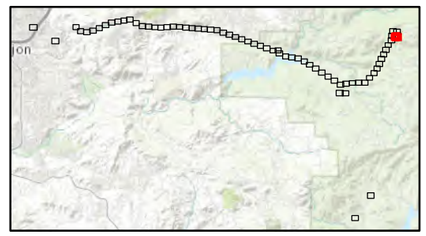
Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

Map 62 of 68

Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Culvert
- Feature Centerline
- Ordinary High Water Mark
- Top of Bank





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

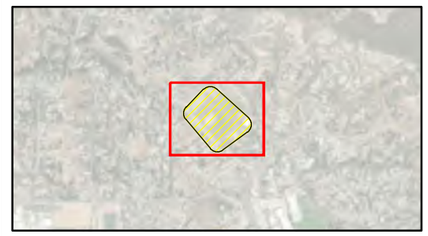
Map 63 of 68

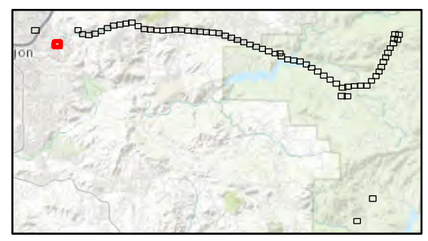
Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Temporary Component

Staging Yard





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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

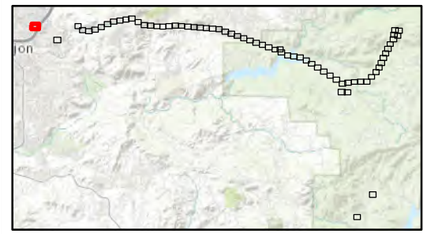
Map 64 of 68

Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Temporary Component

Staging Yard



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Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

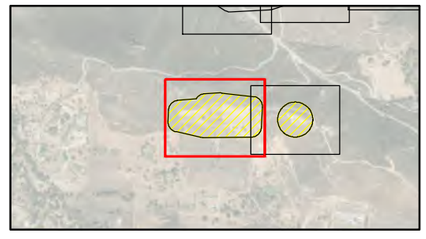
Map 65 of 68

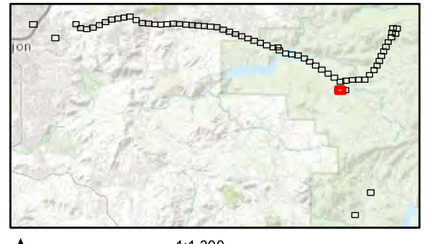
Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Temporary Component

Staging Yard





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

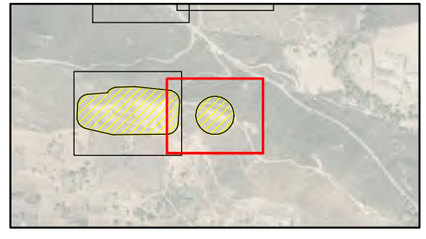
Map 66 of 68

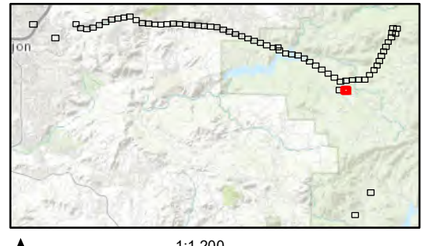
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Freshwater Pond)

Temporary Component

- Fly Yard
- Staging Yard





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ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

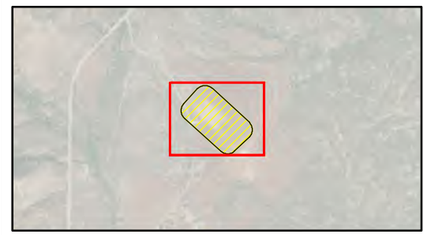
Map 67 of 68

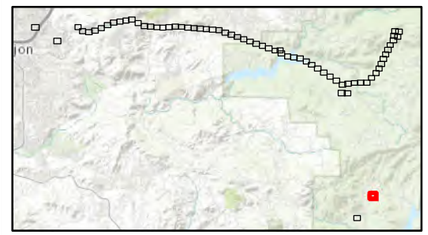
Suncrest 230 Kilovolt Loop-In Project

- Survey Area
- Area Not Accessed
- NWI Feature (Riverine)

Temporary Component

- Staging Yard





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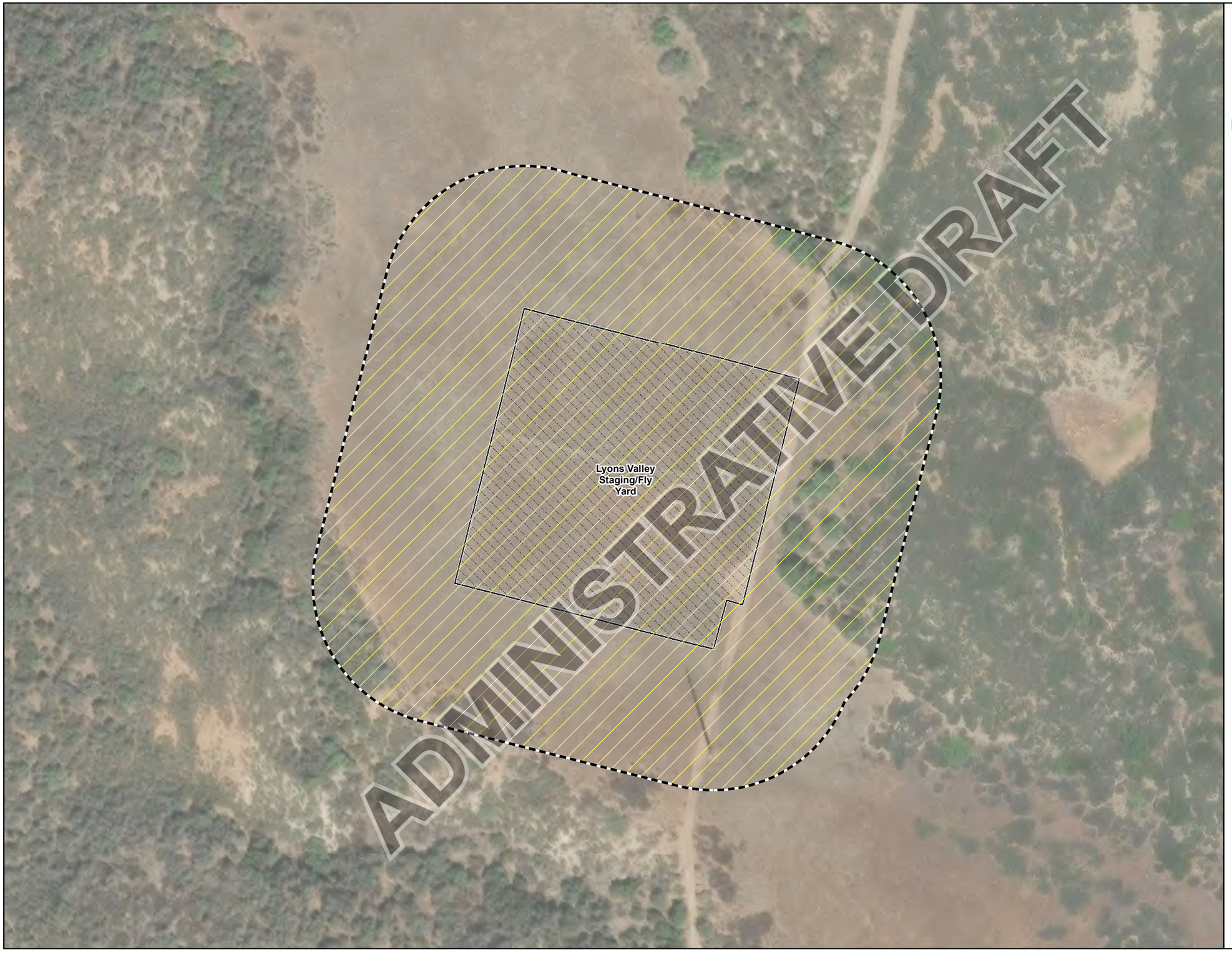


ADMINISTRATIVE DRAFT

Attachment 3.11-B:
Hydrologic Features in the Proposed Project Area

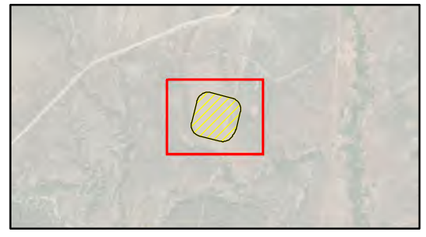
Map 68 of 68

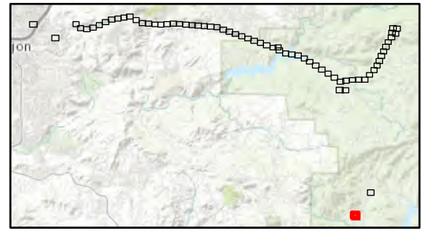
Suncrest 230 Kilovolt Loop-In Project

Survey Area
Area Not Accessed

Temporary Component

Staging Yard/Fly Yard





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3.12 LAND USE AND PLANNING

This section describes the existing conditions for land use and planning in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.12.1 Environmental Setting

3.12.1.1 Project Area

The Proposed Project would cross unincorporated communities within San Diego County and the City of El Cajon in California, as well as land managed and/or owned by the United States (U.S.) Forest Service (USFS) (i.e., Cleveland National Forest [CNF]), Sweetwater Authority, Endangered Habitats Conservancy (owned by the County of San Diego [County]), California Department of Fish and Wildlife (CDFW), and lands under private open space easements, as summarized in Table 3.12-1: Land Use Jurisdiction of Project Components.[1] The Proposed Project would primarily cross open space/undeveloped land and residential areas, while paralleling existing road rights-of-way (ROWs) and electrical infrastructure.

The proposed 230 kV western underground (UG) segment would start on Vista De Montemar within the Crestridge Ecological Reserve, which is managed by the CDFW and is located east of the City of El Cajon. The proposed 230 kV western UG segment would continue in an easterly direction along existing roads for approximately 3 miles, crossing private land (including private open space easements) in residential areas until transitioning to the overhead portion of the route.

The proposed 230 kV overhead (OH) segment would traverse cross-country terrain in a southeasterly direction, crossing private land (including private open space easements) and briefly crossing a County-owned parcel, managed by the Endangered Habitat Conservancy, for approximately 4.5 miles before entering land managed by Sweetwater Authority. It would continue southeast through Sweetwater Authority land and private land (including private open space easements), running generally parallel to Japatul Road before entering the CNF. The proposed 230 kV OH segment would continue through the CNF in a northeasterly direction for approximately 3 miles before transitioning back to the eastern proposed 230 kV UG segment.

The proposed 230 kV eastern UG segment would begin on land owned by SDG&E and loop into and terminate within SDG&E's existing Suncrest Substation.

3.12.1.2 Existing Land Use

3.12.1.2.1 Proposed 230 Kilovolt Underground Segment

The proposed 230 kV western UG segment would extend approximately 3 miles from within the Crestridge Ecological Reserve, which is located east of the City of El Cajon, to the end of Canyon Rim Drive in unincorporated San Diego County.

[1] Each proposed 230 kV underground [UG] segment includes two cable poles. The longer cable pole was used to calculate the approximate distance the underground alignment would cross within each land use jurisdiction.

Table 3.12-1: Land Use Jurisdiction of Project Components

Jurisdiction	Proposed Project Component	Approximate Distance Crossed/Area Covered by the Proposed Project
CDFW	230 kV western UG Segment	0.41 mile
CNF	230 kV OH Segment	2.97 miles
Endangered Habitats Conservancy/County	230 kV OH Segment	0.20 mile
Private	230 kV western UG Segment	2.64 miles
	230 kV eastern UG Segment	0.48 mile
	230 kV OH Segment	4.15 miles
	Suncrest Substation	36.8 acres
	Greenfield Staging Yard	8.55 acres
	High Glen Staging Yard	7.02 acres
	High Glen Fly Yard	0.79 acres
	Hospital Staging Yard	6.78 acres
	Swat Staging Yard	6.80 acres
	Lyons Valley Staging/Fly Yard	2.04 acres
	Sweetwater Staging/Fly Yard	0.49 acre
Private Open Space Easement	230 kV OH Segment	1.36 miles
Sweetwater Authority	230 kV OH Segment	2.29 miles

Source: San Diego Geographic Information Source (SanGIS) 2025

The route would cross the unincorporated community of Crest, primarily passing through existing roads surrounded by areas largely characterized by open space, vacant and undeveloped land, and residential neighborhoods predominantly composed of single-family homes along paved streets. The proposed 230 kV eastern UG segment would be located on undeveloped land owned by SDG&E before terminating within SDG&E's existing Suncrest Substation.

3.12.1.2.2 Proposed 230 Kilovolt Overhead Segment

The proposed 230 kV OH segment would travel approximately 11 miles from the end of the proposed 230 kV western UG segment to the beginning of the proposed 230 kV eastern UG segment. The route would cross the unincorporated communities of Crest, Harbison Canyon, and Alpine, spanning areas largely characterized by single-family residential homes and neighborhoods in a rural setting, open space, vacant and undeveloped land, Sweetwater Authority-managed land, and natural areas associated with the CNF.

3.12.1.2.3 Suncrest Substation

SDG&E's existing Suncrest Substation is located on land owned by SDG&E, approximately 2.73 miles east of the unincorporated community of Alpine. The surrounding land uses include natural areas, vacant and undeveloped land, and rural residential areas.

3.12.1.3 General Plan Land Use Designations and Zoning

This section describes the general plan land use and zoning designations crossed by the Proposed Project. Figure 3.12-1: General Plan Land Use Designations within 1 Mile of the Proposed Project depicts the land use designations within 1 mile of the Proposed Project, and Table 3.12-2: General Plan Land Use Designations Crossed by the Proposed Project summarizes the general plan land use designations crossed by the Proposed Project as defined by the County and the City of El Cajon's current general plans. Figure 3.12-2: Zoning Designations within 1 Mile of the Proposed Project depicts the zoning designations within 1 mile of the Proposed Project. Table 3.12-3: Zoning Designations Crossed by the Proposed Project summarizes the zoning designations crossed by the Proposed Project.

3.12.1.3.1 Proposed 230 Kilovolt Underground Segment

The proposed 230 kV western UG segment would be located within existing roads on land designated as Public Agency, Rural Lands (RL-20), and Semi-Rural Residential (SR-1, SR-2, and SR-4). The proposed 230 kV eastern UG segment would be located on land designated as Rural Lands (RL-80). Lands designated as Public Agency are typically owned or managed by governmental entities for public services or infrastructure; in this case, the land is managed by the USFS. RL and SR designations support low-density residential development and are intended to maintain the area's rural character, with increasing housing density permitted as the SR designation number decreases (County of San Diego 2011a). The proposed 230 kV western UG segment would be on land zoned as Limited Agricultural (A70), General Agricultural (A72), and Rural Residential (RR). The proposed 230 kV eastern UG segment would be located on land designated as A72. These zoning designations are intended to support agricultural uses and low-density rural living.A70 and A72 zones allow for agricultural use, with A72 permitting a broader range of agricultural uses. RR zoning is designed for low-density residential development (County of San Diego 2000).

Table 3.12-2: General Plan Land Use Designations Crossed by the Proposed Project

County/City	Land Use Designation	Proposed Project Component	Approximate Distance Crossed/Area Covered by the Proposed Project
County	Open Space (Conservation)	230 kV OH Segment	0.21 mile
		Swat Staging Yard	6.80 acres
		Lyons Valley Staging/Fly Yard	2.04 acres
	Public Agency Lands	230 kV western UG Segment	0.46 mile
		230 kV OH Segment	5.30 miles
		Sweetwater Staging/Fly Yard	0.49 acre
	Public/Semi-Public Facilities	Greenfield Staging Yard	8.55 acres
	Rural Lands (RL-20)	230 kV western UG Segment	0.95 mile
		230 kV OH Segment	2.99 miles
		230 kV OH Segment	1.18 mile
		High Glen Staging Yard	7.02 acres
		High Glen Fly Yard	0.79 acres
	Rural Lands (RL-80)	Suncrest Substation	36.8 acres
		230 kV eastern UG segment	0.48 mile
	Semi-Rural Residential (SR-1)	230 kV western UG Segment	0.25 mile
	Semi-Rural Residential (SR-2)	230 kV western UG Segment	0.65 mile
		230 kV OH Segment	0.77 mile
	Semi-Rural Residential (SR-4)	230 kV western UG Segment	0.75 mile
		230 kV OH Segment	0.54 mile
City of El Cajon	Public Institution (PI)	Hospital Staging Yard	6.78 acres

Sources: City of El Cajon 2025a, SanGIS 2025

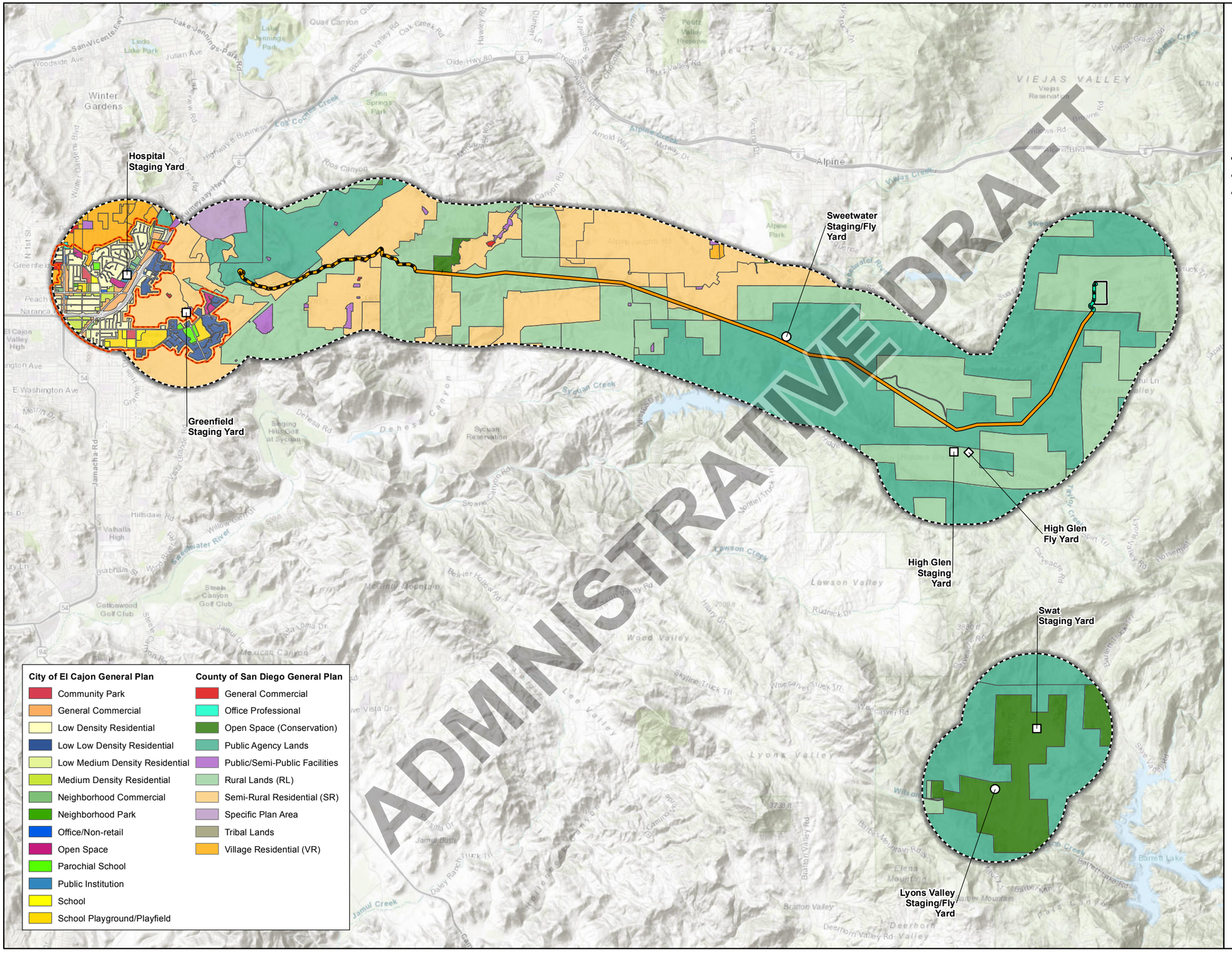

Figure 3.12-1: General Plan Land Use Designations within 1 Mile of the Proposed Project

Suncrest 230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer
- City of El Cajon General Plan

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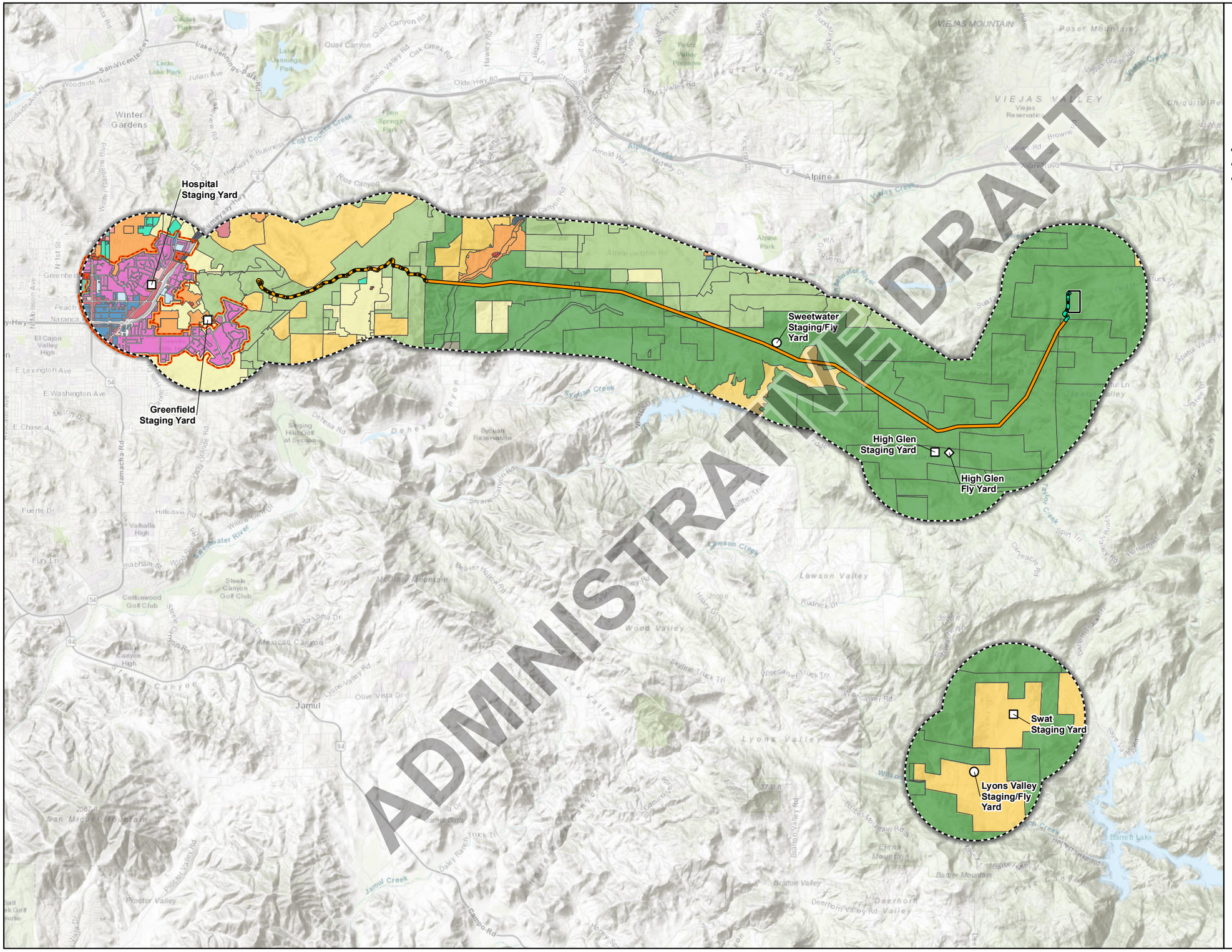

Figure 3.12-2: Zoning Designations within 1 Mile of the Proposed Project

Suncrest 230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging Yard/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer
- City of El Cajon Zoning

County of San Diego Zoning

- Limited Agricultural Use (A70)
- General Agricultural (A72)
- General Commercial (C36)
- Residential-Commercial (RC)
- Indian Reservation
- Mobilehome Residential (RMH)
- Rural Residential (RR)
- Single Residential (RS)
- Urban Residential (RU)
- Variable Family (RV)
- Open Space (S80)
- Specific Plan (S88)
- Transportation and Utility Corridor (S94)
- General Rural (S92)

City of El Cajon Zoning

- General Commercial (C-G)
- Neighborhood Commercial (C-N)
- Office Professional (O-P)
- Planned Residential Development (PRD)
- Multi-family Residential (RD)
- Single Residential (RS)

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Table 3.12-3: Zoning Designations Crossed by the Proposed Project

County/City	Zoning Designation	Proposed Project Component	Approximate Distance Crossed/Area Covered by the Proposed Project
San Diego County	Limited Agricultural Use (A70)	230 kV western UG Segment	2.80 miles
		230 kV OH Segment	0.28 mile
	General Agricultural (A72)	230 kV eastern UG Segment	0.48 mile
		230 kV western UG Segment	0.01 mile
		230 kV OH Segment	10.16 miles
		Suncrest Substation	36.8 acres
		High Glen Staging Yard	7.02 acres
		High Glen Fly Yard	0.79 acres
		Sweetwater Staging and Fly Yard	0.49 acres
	Open Space (S80)	230 kV OH Segment	0.54 mile
		SWAT Staging Yard	6.80 acres
		Lyons Valley Staging and Fly Yard	2.04 acres
	Rural Residential (RR)	230 kV western UG Segment	0.24 mile
		Greenfield Staging Yard	8.55 acres
City of El Cajon	Office Professional (O-P)	Hospital Staging Yard	6.78 acres

Sources: City of El Cajon 2025a, SanGIS 2025

3.12.1.3.2 Proposed 230 Kilovolt Overhead Segment

The Proposed Project's 230 kV OH segment would be located on land designated as Open Space (Conservation), Public Agency, RL-20, RL-40, SR-2, and SR-4. Descriptions of the Public Agency, RL, and SR land uses are provided previously in Section 3.12.1.3.1 Proposed 230 Kilovolt Underground Segment. Lands designated as Open Space (Conservation) provide areas for the protection and preservation of natural resources, wildlife habitat, and scenic landscapes (County of San Diego 2011a).

The proposed 230 kV OH segment would be located on land zoned as A70, A72, and Open Space (S80). Descriptions of the A70 and A72 zones are provided previously in Section 3.12.1.3.1 Proposed 230 Kilovolt Underground Segment. Lands zoned as Open Space (S80) are intended for areas used for recreation or areas with severe environmental constraints. These areas could include parks, natural reserves, or areas with sensitive ecosystems (County of San Diego 2000).

3.12.1.3.3 Suncrest Substation

SDG&E's existing Suncrest Substation is located on land designated as RL-80 and zoned as A72. Descriptions of these designations are provided previously in Section 3.12.1.3.1 Proposed 230 Kilovolt Underground Segment.

3.12.1.3.4 Proposed Staging Yards

The Proposed Project would utilize six temporary staging yards to accommodate material receiving, laydown areas, and worker parking. In addition, three fly yards would be established to support helicopter landings and material pickup operations. The proposed Greenfield Staging Yard, High Glen Staging Yard, High Glen Fly Yard, Swat Staging Yard, Sweetwater Staging/Fly Yard, and Lyons Valley Staging/Fly Yard would be located on lands designated and zoned by the County, but the proposed Hospital Staging Yard would be located on land designated and zoned by the City of El Cajon. Descriptions of land use and zoning designations not covered in this section are provided in Section 3.12.1.3.1 Proposed 230 Kilovolt Underground Segment and Section 3.12.1.3.2 Proposed 230 Kilovolt Overhead Segment.

The proposed Greenfield Staging Yard would be located on land designated as Public/Semi-Public Facilities and zoned as RR. Lands designated as Public/Semi-Public Facilities provide for diverse public needs and institutional operations, such as airports, schools, utilities, and civic centers. The proposed High Glen Staging Yard and High Glen Fly Yard would be located on land designated as RL-40 and zoned as A72. The proposed Swat Staging Yard and proposed Lyons Valley Staging/Fly Yard would be located on land designated as Open Space (Conservation) and zoned as S80. The proposed Sweetwater Staging/Fly Yard would be located on land designated as Public Agency Lands and zoned as A72.

The proposed Hospital Staging Yard would be located on land designated as PI and zoned as O-P. Lands designated as PI are typically intended for government, educational, healthcare, and other civic-serving purposes, while O-P zoning is designed to provide professional and administrative offices in a setting that is compatible with nearby residential neighborhoods (City of El Cajon 2000, 2025a).

3.12.1.4 Special Land Uses

3.12.1.4.1 Lands Administered by Federal, State, or Local Agencies, or Private Conservation Organizations

This section describes the lands managed by federal, state, or local agencies, or private conservation organizations, as well as lands subject to private conservation and open space easements, that are either crossed by the Proposed Project or located within 1 mile of its alignment. The proposed 230 kV UG segment would cross lands managed by the CDFW within the Crestridge Ecological Reserve, as well as lands subject to private conservation and open space easements. The proposed 230 kV OH segment would traverse lands managed by the USFS, the Sweetwater Authority, and the Endangered Habitats Conservancy (owned by the County), as well as lands subject to private conservation and open space easements. While the Proposed Project would not cross lands managed by the Back Country Land Trust (BCLT) or the Bureau of Indian Affairs (BIA), parcels under their jurisdiction are located within 1 mile of the Proposed Project. The Stoneridge Preserve, which is owned by the County and subject to private

conservation and open space easements, is also located within 1 mile but is not directly crossed by the Proposed Project. Figure 3.12-3: Special Land Uses in the Proposed Project Vicinity depicts the special land uses crossed by and within 1 mile of the Proposed Project.

United States Forest Service

The USFS manages the CNF, which is the southernmost National Forest in California. Consisting of approximately 460,000 acres, the forest offers a wide variety of terrains and recreational opportunities (National Forest Foundation [NFF] 2025). The proposed 230 kV OH segment would traverse approximately 3 miles of CNF lands within the Descanso Ranger District. The Descanso Ranger District is characterized by the most mixed landownership pattern in the CNF. This portion of the district acts as a transition zone between the outskirts of metropolitan San Diego and the relatively undeveloped mountain, desert, and open space areas of eastern San Diego County and supports several rural residential communities located along the Interstate [I-] 8 corridor (USFS 2005b).

Land management within the CNF is guided by the Land Management Plan (LMP) and the approved LMP Amendment, which together constitute the long-range planning framework for the CNF. These documents are further discussed in Section 3.12.2 Regulatory Setting. The LMP identifies specific land use zones that determine the appropriate types of management activities on USFS lands.

The Proposed Project would cross lands designated as Developed Area Interface and Back Country Motorized Use Restricted. These zones are intended to balance resource protection with public access and infrastructure needs. Table 3.12-4: CNF Land Use Zones Crossed by the Proposed Project describes the CNF land use zones crossed by the proposed 230 kV OH segment. Table 3.12-5: CNF Suitable Land Uses displays the suitability of specific uses relevant to the Proposed Project in the Developed Area Interface and Back Country Motorized Use Restricted land designations (USFS 2005b).

California Department of Fish and Wildlife

The Crestridge Ecological Reserve, managed by the CDFW, is an approximately 2,800-acre property located adjacent to the unincorporated communities of Granite Hills and Crest. As a designated unit of the County of San Diego's Multiple Species Conservation Program (MSCP), the reserve is managed in accordance with the Habitat Management and Monitoring Plan (HMMP) for the Crestridge Ecological Reserve, which ensures consistency with the MSCP goals. The reserve is valued as open space by the surrounding community of Crest and provides protection for diverse vegetation and wildlife communities (CDFW 2025). Approximately 1.3 miles of SDG&E's existing 200-foot-wide easement and associated infrastructure traverse the reserve. Approximately 0.41 mile of the proposed 230 kV western UG segment would be located within the existing Vista De Montemar roadway that is within the reserve.

Table 3.12-4: CNF Land Use Zones Crossed by the Proposed Project

Land Use Zone	Zone Description	Proposed Project Component	Proposed Poles	Approximate Distance Crossed by the Proposed Project (miles)
Developed Area Interface	Includes areas adjacent to communities or concentrated developed areas with more scattered or isolated community infrastructure. The level of human use and infrastructure is typically higher than in other zones.	230 kV OH Segment	45-49 and 54	1.35
Back Country-Motorized Use Restricted	Includes areas of the National Forest that are generally undeveloped with few roads. Few facilities are found in this zone (some may occur in remote locations), and the level of human use and infrastructure is low to moderate.	230 kV OH Segment	49.1, 50-53, and 55	1.63

Source: USFS 2005b

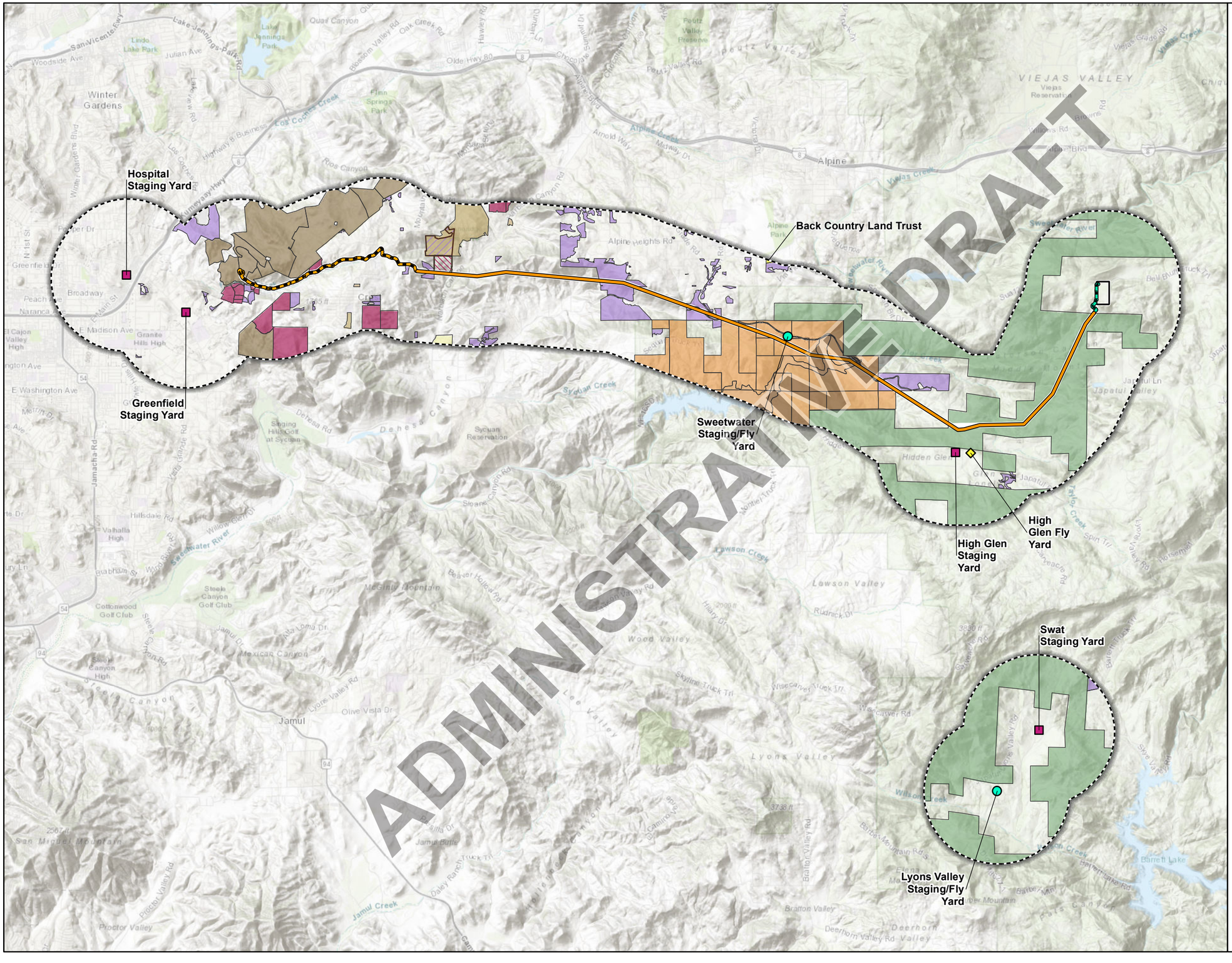
Table 3.12-5: CNF Suitable Land Uses

Activity or Use	Developed Area Interface	Back Country Motorized Use Restricted
Authorized Motorized Use	Suitable	Suitable
Off-Highway Vehicle Use on Forest System Roads and Trails	Designated Roads and Trails	Not Suitable
Public Motorized Use off Forest System Roads and Trails	Suitable in Designated Open Areas	Not Suitable
(Non-Rec) Special Uses: Low Intensity Land Use	Suitable	Suitable
Major Utility Corridors	Designated Areas	Designated Areas
Road Construction or Reconstruction	Suitable	Suitable for authorized use
Developed Facilities	Suitable	By Exception

Source: USFS 2005b
Note: "By Exception" means conditions that are not generally compatible with the land use zone, but may be appropriate under certain circumstances.

Figure 3.12-3:
Special Land Uses
in the Proposed Project Vicinity

Suncrest
230 Kilovolt Loop-In Project



- Fly Yard
- Staging Yard
- Staging Yard/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer

Special Land Use

- Back Country Land Trust
- Bureau of Indian Affairs
- California Department of Fish and Wildlife/Crestridge Ecological Reserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego/Stoneridge Preserve
- Endangered Habitats Conservancy
- Private Conservation and Open Space Easement
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement
- Sweetwater Authority
- United States Forest Service/Cleveland National Forest

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Sweetwater Authority

Sweetwater Authority is a publicly owned water agency that supplies water to approximately 200,000 residents in National City, Bonita, and the western and central portions of Chula Vista, California. The agency owns and operates two local reservoirs, including Loveland Reservoir, which would be crossed by the proposed 230 kV OH segment. Located near Alpine, Loveland Reservoir functions as a storage facility, releasing water downstream to the Sweetwater Dam. The reservoir and surrounding areas also offer opportunities for recreation, including fishing and hiking (Sweetwater Authority 2025). Approximately 2.29 miles of the proposed 230 kV OH segment would cross land owned by the Sweetwater Authority.

The Endangered Habitats Conservancy

The Endangered Habitats Conservancy is a nonprofit land trust organization that works to acquire, manage, monitor, and maintain land in Southern California for habitat protection and restoration, agricultural preservation, and other conservation purposes (Endangered Habitats League [EHL] 2025). Approximately 0.20 mile of the proposed 230 kV OH segment would cross land that is owned by the County, but managed under agreement by the Endangered Habitats Conservancy. On these lands, the Endangered Habitats Conservancy is responsible for implementing habitat management and monitoring in accordance with conservation goals established in coordination with the County and regulatory agencies. Additional parcels within the 1-mile buffer are owned solely by the Endangered Habitats Conservancy and are not subject to County ownership.

Private Conservation and Open Space Easements

The Proposed Project would cross several parcels that are subject to private open space easements. No private conservation easements were identified. Private open space easements are legally binding agreements between a landowner and a qualified conservation organization or public agency that limit certain types of land use to protect the property's conservation values in perpetuity. These easements are recorded on the land title and restrict development, grading, or other ground-disturbing activities in order to preserve specified biological, scenic, or open space resources.

Approximately 1.36 miles of the proposed 230 kV OH segment would be located on lands subject to private open space easements or designations. The ownership and terms of each easement vary by parcel, but many include restrictions on development, grading, and other ground-disturbing activities to protect biological, scenic, or open space resources. Any work proposed within these areas would seek to comply with the terms and conditions set forth in the individual easement agreements where practicable. Coordination with the easement holders and private landowners would be required to maintain consistency with conservation objectives and avoid or mitigate impacts to the specific resources.

County of San Diego

The County owns and manages the Stoneridge Preserve, an approximately 248-acre area consisting of native habitat. The preserve is not currently open to the public and is approximately 0.25 mile from the Proposed Project.

Back Country Land Trust

The BCLT is a nonprofit land conservancy based in Alpine, California, dedicated to preserving and enhancing the natural, scenic, cultural, and agricultural heritage of eastern San Diego County. Wright's Field, an approximately 230-acre nature reserve, is managed by the BCLT and is located approximately 0.95 mile from the Proposed Project.

Bureau of Indian Affairs

The BIA, a division of the U.S. Department of the Interior, is responsible for managing the federal government's trust responsibilities and relationships with federally recognized Native American tribes. The agency oversees approximately 56 million acres of land held in trust for tribes and individual Native Americans, including management of associated natural resources such as forests and minerals. Approximately 21 acres of BIA-administered land is located within a 1-mile radius of the Proposed Project; however, the nearest of these lands is located approximately 0.85 mile from the Proposed Project.

3.12.1.5 Habitat Conservation Plans

In 1995, SDG&E entered into an agreement with the U.S. Fish and Wildlife Service (USFWS) and the CDFW to establish its Subregional Natural Communities Conservation Plan (NCCP)/Habitat Conservation Plan (HCP). However, federal authorizations from the USFWS under this 30-year plan have been replaced by the 2023 HCP Amendment. The HCP Amendment modernizes the approach to habitat conservation planning and expands environmental and species protections across SDG&E's territory. The HCP Amendment authorizes incidental take of listed species in accordance with the federal Endangered Species Act (FESA) and outlines long-term conservation strategies consistent with federal and state requirements. In addition, the USFWS issued a permit for the Low-Effect HCP (LEHCP) for the issuance of an incidental take permit for the federally endangered Quino checkerspot butterfly for SDG&E. The Quino checkerspot butterfly is covered independently because the HCP Amendment does not include Quino checkerspot butterfly in its list of covered species. The Proposed Project components would be located on lands subject to SDG&E's HCP Amendment and LEHCP.

3.12.2 Regulatory Setting

3.12.2.1 Federal

3.12.2.1.1 Forest Service Strategic Plan

The U.S. Department of Agriculture (USDA) Forest Service Strategic Plan: FY 2015-2020[2] provides direction that that guides the USFS in delivering its mission to "sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations" (USDA 2015). Strategic plans are prepared every 5 years to identify major issues that are important to the management of national resources and to establish strategic goals that the USFS will focus on nationwide for the 5-year period. Key items of the strategic plan include fostering resilient and adaptive ecosystems to mitigate climate change, mitigating

[2] A current fiscal year plan covering 2025 is not yet available for public review.

wildfire risk, the conservation of open space, and the provision and sustainment of benefits to the American people (USDA 2015).

3.12.2.1.2 Southern California National Forests Land Management Plan

The Southern California National Forests LMP outlines the broad, program-level strategic direction for managing the Angeles National Forest, Los Padres National Forest, San Bernardino National Forest, and CNF—collectively referred to as the Southern California National Forests. The LMP is composed of three interrelated parts (Parts 1, 2, and 3), which collectively "facilitate the use of adaptive management and the development of the management activities" to guide the forests toward their desired conditions (USFS 2005a, 2005b, 2005c). Key items within Parts 1 through 3 of the LMP are summarized in the following subsections to highlight their relevance to the Proposed Project.

Part 1: Southern California National Forests Vision

Part 1 of the LMP serves as a vision document that outlines existing management challenges, strategic goals, and desired conditions (USFS 2005a). The following strategic goals are relevant to the Proposed Project:

- **Goal 4.1a.** Administer minerals and energy resource development while protecting ecosystem health.
- **Goal 7.1.** Retain natural areas as a core for a regional network while focusing the built environment into the minimum land area needed to support growing public needs.

Appendix A, Government Performance Results Act Priority National Goals, discusses the goals identified in the strategic plan and identifies applicable objectives that support the goals. The following national strategic plan goal in Appendix A is relevant to the Proposed Project:

- **Goal 4.** Help meet energy resource needs.

Part 2: Cleveland National Forest Strategy

Part 2 of the LMP includes the CNF LMP and addresses land use designations and the suitable uses within each designation (USFS 2005b). As previously described in Section 3.12.1.4.1 Lands Administered by Federal, State, or Local Agencies, or Private Conservation Organizations, the Proposed Project would be located within the Developed Areas Interface and Back Country, Motorized Use Restricted land uses zones. Part 2 of the LMP also divides the CNF into a series of geographical units referred to as Places. Each Place has its own visual and cultural impression of landscape attributes. The Proposed Project would traverse the Sweetwater Place, which serves as a transition zone between the metropolitan area and undeveloped land of east San Diego County. The Sweetwater Place contains the I-8 corridor, the primary entrance to the CNF, and is home to tens of thousands of people. Its character reflects a mix of natural, rural, and urban elements. The desired condition for the Sweetwater Place is to maintain its natural, undeveloped landscape in an otherwise highly developed rural setting.

The following forest-specific design criterion is relevant to the Proposed Project:

- **Criteria CNF S5.** Consolidate major transportation and utility corridors by co-locating facilities and/or expanding existing corridors.

Appendix B, Program Strategies, describes detailed program strategies that the CNF may implement to achieve desired conditions and goals. Applicable land use strategies relevant to the Proposed Project are as follows:

- **Strategy LM 1 Landscape Aesthetics.** Manage landscapes and built elements in order to achieve scenic integrity objectives. Also, use the best environmental design practices to harmonize changes in the landscape and to advance environmentally sustainable design solutions.

- **Strategy LM 2 Landscape Restoration.** Restore landscapes to reduce visual effects of management activities and nonconforming features. Also, prioritize landscape restoration activities in key places (Aguanga, Elsinore, Laguna, Morena, Palomar Mountain, Pine Creek, San Dieguito/Black Mountain, San Mateo, Silverado, Sweetwater, and Upper San Diego River). Integrate restoration activities with other resource restoration.

- **Strategy LM 3 Landscape Character.** Maintain the character of National Forest System lands in order to preserve their intact nature, valued attributes, and open space. Maintain the integrity of the expansive, unencumbered landscapes and traditional cultural features that provide the distinctive character of places. Plan, design, and improve infrastructure along scenic travel routes to meet scenic integrity objectives.

- **Strategy Lands 2 – Non-recreation Special Use Authorizations.** Administer existing special-use authorizations in threatened, endangered, proposed, and candidate species habitats to ensure they avoid or minimize impacts to threatened, endangered, proposed and candidate species and their habitats; cultural and scenic resources; and open space values. Require special-use authorizations to maximize opportunities to co-locate facilities and minimize the encumbrance of National Forest System land. For special-use authorization holders operating within threatened, endangered, proposed, and candidate species key and occupied habitats, develop and provide information and education on the ways to avoid and minimize effects of their activities on occupied threatened, endangered, proposed, and candidate species habitat. Use signing, barriers, or other suitable measures to protect threatened, endangered, proposed, and candidate species in key and occupied habitats within the special-use authorization areas.

- **Strategy ME 1- Minerals Management.** Manage minerals and energy resources commensurate with the conservation of forest resource values and the long-term health and biological diversity of ecosystems. Facilitate environmentally and culturally sensitive exploration, development, and production of mineral and energy resources on National Forest System land open to these activities, or on withdrawn lands consistent with valid existing rights, and integrate these activities with the planning and management of other resources.

Part 3: Design Criteria for the Southern California National Forests

Part 3 provides design criteria/forest plan standards and guidelines applicable to the Southern California National Forests including the CNF (USFS 2005c). The following land use and planning-related design standard is relevant to the Proposed Project:

- **When Implementing Lands and Special-Uses Activities S42.** Include provisions for raptor safety when issuing permits for new power lines and communication sites. Also implement these guidelines for existing permits within one year in identified high-use flyways of the California condor, and within five years in other high-use raptor flyways. Coordinate with California Department of Fish and Game, U.S. Fish & Wildlife Service, and power agencies to identify the high-use flyways.

3.12.2.1.3 Region 5 Supplement to Forest Service Manual 2700 – Special Uses Supplement Number 2700-2021-1

Chapter 2720 – Special Use Administration of the Region 5 Supplement to Forest Service Manual 2700 provides direction for the management of power line installations on National Forest System lands in California. The purpose of this guidance is to minimize long-term conflicts with forest resource management and to reduce fire and safety hazards. No policies or guidance relevant to the Proposed Project and land use and planning were identified in this manual (USFS 2021).

3.12.2.1.4 Federal Land Policy and Management Act

Title V, Rights-of-Way of the Federal Land Policy and Management Act (FLPMA) authorizes the Secretary of the Interior, with respect to public lands, and the Secretary of Agriculture, with respect to lands within the National Forest System (with the exception of designated wilderness), to grant, issue, or renew ROWs "over, under or through" lands for systems for the generation, transmission, and distribution of electric energy (43 U.S. Code [U.S.C.] 1701 et seq.). Further, ROWs and permits granted "shall be limited to a reasonable term" with consideration given to facility cost, useful life of facilities, and the public purpose the facility serves (43 U.S.C. 1701 et seq.). Also, FLPMA authorizes the Secretary with jurisdiction over the project in question to require ROW applicants to submit a plan of construction, operation, and rehabilitation for the ROW if significant environmental impacts are anticipated. ROW grants must contain terms and conditions that minimize damage to scenic and aesthetic values and fish and wildlife habitat and otherwise protect the environment; require compliance with applicable air and water quality standards established by or pursuant to applicable federal or state law; and require compliance with state standards for public health and safety, environmental protection, and siting, construction, operation, and maintenance of or for ROWs for similar purposes if those standards are more stringent than applicable federal standards.

3.12.2.2 State

3.12.2.2.1 California Department of Fish and Wildlife – Ecological Reserve

The Crestridge Ecological Reserve is a state-designated ecological reserve managed by the CDFW. Ecological reserves are established under the authority of California Fish and Game Code Section 1580 and are governed by Title 14 California Code of Regulations Section 630. These regulations aim to conserve rare, threatened, or endangered native plants, wildlife, aquatic

organisms, and specialized terrestrial or aquatic habitat types. Any activities within the reserve, including access for construction or maintenance, require prior coordination with the CDFW to ensure the continued protection of ecological values.

3.12.2.2.2 Crestridge Ecological Reserve Habitat Management and Monitoring Plan

The Crestridge Ecological Reserve HMMP provides a long-term framework for managing biological resources within the reserve, consistent with the goals of the County's MSCP. The HMMP outlines conservation objectives, land management practices, and monitoring protocols designed to preserve sensitive habitats and species while balancing public access and use (Conservation Biology Institute 2002).

3.12.2.3 Local

3.12.2.3.1 County of San Diego

San Diego County General Plan

The Land Use Element of the San Diego County General Plan provides a framework to accommodate future development in an efficient and sustainable manner that is compatible with the character of unincorporated communities and the protection of valuable and sensitive natural resources (County of San Diego 2011a). The Land Use Element contains the following policies that pertain to the Proposed Project:

- **Policy LU-5.3 Rural Land Preservation.** Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development[3] under the Rural and Semi-Rural Land Use Designations.

- **Policy LU-6.1 Environmental Sustainability.** Require the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment.

- **Policy LU-7.1 Agricultural Land Development.** Protect agricultural lands with lower-density land use designations that support continued agricultural operations.

- **Policy LU-10.2 Development – Environmental Resource Relationship.** Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.

- **Policy LU-12.3 Infrastructure and Services Compatibility.** Provide public facilities and services that are sensitive to the environment with characteristics of the

[3] The San Diego County General Plan defines development as "physical changes to land or structures that are subject to approval by the County, or other approvals by the County that ready land or structures for such changes" (County of San Diego 2011a).

unincorporated communities. Encourage the collocation of infrastructure facilities, where appropriate.

- **Policy LU-12.4 Planning for Compatibility.** Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas.

In addition, the Conservation and Open Space Element provides direction to future growth and development in the county with respect to the conservation, management, and utilization of natural and cultural resources; the protection and preservation of open space; and the provision of park and recreation resources (County of San Diego 2011a). The following policy from the Conservation and Open Space Element is relevant to the Proposed Project:

- **Policy COS-2.1 Protection, Restoration and Enhancement.** Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories.

Alpine Community Plan

The Draft Alpine Community Plan includes the following goal and policy that are relevant to land use and the Proposed Project (County of San Diego 2020):

- **Goal COS-3.** Create an open space system that provides connectivity for the community and wildlife, and provides buffers between open space and developments.

- **Policy COS-3.1.** Encourage preservation/conservation of open space corridors that connect the community of Alpine to the following:

  - Cleveland National Forest
  - El Capitan and Loveland Reservoirs
  - Sweetwater River Basin

Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan

The Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan includes the following goal and policy that are relevant to land use and the Proposed Project (County of San Diego 2011b):

- **Goal LU 1.1.** Develop land in a manner that reinforces the identity of the existing communities of Crest, Dehesa, Harbison Canyon, and Granite Hills, while maintaining each area's rural, rustic character.

- **Policy LU 3.1.23.** Discourage uses that are incompatible with the semirural residential character of Granite Hills.

County of San Diego Multiple Species Conservation Program

The County's MSCP is a comprehensive, long-term habitat conservation planning program developed by the County and participating local jurisdictions. It is designed to preserve native vegetation and wildlife while streamlining permitting for development and infrastructure projects. The MSCP is implemented locally through jurisdiction-specific Subarea Plans, which guide land use and conservation decisions within the MSCP area. Although the MSCP is administered at the local level, it was developed in coordination with the CDFW under the Natural Community Conservation Planning Act and with the USFWS under FESA. Through participation in the MSCP, local jurisdictions can obtain state and federal permits that authorize incidental take of covered species, provided that the project complies with the conservation goals of the MSCP. The Proposed Project would be located within the proposed boundaries of the MSCP's East County Subarea Plan. The East County Subarea Plan is currently in draft form and has not been finalized as of February 2026.

Sweetwater Authority Strategic Plan

The Sweetwater Authority Strategic Plan serves as a comprehensive framework guiding the agency's operations, infrastructure development, and resource management within its service area, which includes portions of southern San Diego County. The strategic plan outlines key goals and objectives aimed at ensuring a reliable water supply, maintaining system infrastructure, promoting environmental stewardship, and engaging with the community (Sweetwater Authority 2023). The plan does not contain policies relevant to the Proposed Project.

3.12.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan lists the following policy and objective that are relevant to land use (City of El Cajon 2000):

- **Policy 8-2.2.** The flat, valley portions of El Cajon shall receive the most intensive development.[4] Hillside areas shall receive less intensive development. Steep hillside areas (slopes more than 25%) shall be placed in the open space land use category.

- **Objective 13-1.** El Cajon will solicit and encourage land uses and facilities which provide services on a region-wide basis.

3.12.3 Impact Analysis and Mitigation Measures

3.12.3.1 Analysis Methodology

Impacts to land use and planning were determined based on information summarized in Section 3.12.1 Environmental Setting that was obtained from review of the following sources:

- San Diego County General Plan, community plans, and zoning ordinance;

[4] The City of El Cajon Code of Ordinances defines development as "any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials" (City of El Cajon 2025b).

- City of El Cajon General Plan and zoning ordinance;
- Southern California National Forests LMP for relevant land use classifications;
- CDFW regulations for ecological reserves;
- SDG&E NCCP and HCP Amendment;
- recorded land conservation and open space easements;
- aerial imagery; and
- local agency planning documents and databases.

3.12.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to land use and planning.

3.12.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For land use and planning, the CEQA Appendix G Environmental Checklist asks if the Project would:

- Physically divide an established community?

- Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

3.12.3.4 Impact Analysis

3.12.3.4.1 Impact LAN-01: Would the project physically divide an established community?

Construction, Operations and Maintenance

No Impact. As detailed in Table 3.12-3: Zoning Designations Crossed by the Proposed Project and depicted in Figure 3.12-2: Zoning Designations within 1 Mile of the Proposed Project, the Proposed Project would primarily be located within or adjacent to existing roadway ROWs, previously disturbed corridors, or open space areas. While the Proposed Project would traverse residential neighborhoods in Crest, Harbison Canyon, and Alpine, the proposed 230 kV western UG segment would be installed beneath existing paved roadways, and the proposed 230 kV OH segment would parallel to existing utility corridors for the majority of the route. Construction activities (e.g., temporary lane closures, construction staging, and equipment movement) could temporarily limit or alter access within residential areas, but would not result in the permanent removal of existing access routes or barriers that would divide communities. Once operational, the Proposed Project would not alter existing circulation patterns, block access, or otherwise divide established communities. The underground alignment and transmission structures would not create physical barriers separating land uses. Therefore, no impact would occur.

3.12.3.4.2 Impact LAN-02: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Construction, Operations and Maintenance

No Impact. Attachment 3.12-A: Land Use Plans and Policies Consistency Analysis includes an analysis of the Proposed Project's consistency with relevant goals, policies, and objectives from local land use plans. Attachment 3.12-A: Land Use Plans and Policies Consistency Analysis also provides an analysis of the Proposed Project's consistency with USFS land policies. No inconsistencies with any plans in Section 3.12.2 Regulatory Setting were identified. As a result, conflicts with existing land use plans, policies, or regulations are not anticipated, and no impacts would occur.

3.12.4 References

CDFW. 2025. Crestridge Ecological Reserve. Online. https://wildlife.ca.gov/Lands/Places-to-Visit/Crestridge-ER. Site visited May 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited September 2025.

City of El Cajon. 2025a. What's My Zone? Online. https://experience.arcgis.com/experience/8838323505034968b10febdd832d1f5c/. Site visited September 2025.

City of El Cajon. 2025b. Code of Ordinances. Online. https://ecode360.com/44373846. Site visited September 2025.

Conservation Biology Institute. 2002. Habitat Management and Monitoring Plan Crestridge Ecological Reserve. Prepared for the CDGW. Online. https://consbio.org/wp-content/uploads/2022/05/Crestridge-Habitat-Management-and-Monitoring-Plan-1.pdf. Site visited May 2025.

County of San Diego. 2000. Zoning Ordinance of San Diego County. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/zoning/2000-REV-12-24.pdf. Site visited May 2025.

County of San Diego. 2011a. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html. Site visited May 2025.

County of San Diego. 2011b. Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/CREST-CP-11-18-15.pdf. Site visited December 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited December 2025.

CPUC. 2023. GO 131-D Rules Relating to the Planning and Construction of Electric Generation, Transmission/Power/Distribution Line Facilities and Substations Located in California. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M521/K748/521748942.pdf. Site visited September 2025.

EHL. 2025. Endangered Habitats Conservancy. Endangered Habitats League. Online. https://www.ehleague.org/EndangeredHabitatsConservancy.html. Site visited May 2025.

NFF. 2025. *Cleveland National Forest*. National Forest Foundation. Online. https://www.nationalforests.org/our-forests/find-a-forest/cleveland. Site visited May 2025.

SanGIS. 2025. Parcel Lookup Tool. Online. https://geo.sandag.org/portal/apps/experiencebuilder/experience/?id=1d105857933641e0a8496d2769b31aec. Site visited September 2025.

Sweetwater Authority. 2023. Strategic Plan. Online. https://www.sweetwater.org/DocumentCenter/View/1361/Strategic-Plan-FY-2019-20-Work-Plan-PDF. Site visited May 2025.

Sweetwater Authority. 2025. Our Water. Online. https://www.sweetwater.org/31/Our-Water. Site visited May 2025.

USDA. 2015. USDA Forest Service Strategic Plan: FY 2015-2020. Online. https://www.fs.usda.gov/sites/default/files/strategic-plan%5B2%5D-6_17_15_revised.pdf. Site visited May 2025.

USFS. 2005a. Land Management, Plan Part 1 Southern California National Forests Vision. Online. https://www.fs.usda.gov/r05/cleveland/planning. Site visited May 2025.

USFS. 2005b. Land Management Plan, Part 2 Cleveland National Forest Strategy. Online. https://www.fs.usda.gov/r05/cleveland/planning. Site visited May 2025.

USFS. 2005c. Land Management Plan, Part 3 Design Criteria for Southern California National Forests. Online. https://www.fs.usda.gov/r05/cleveland/planning. Site visited May 2025.

USFS. 2021. Forest Service Manual 2700 – Special Uses Management, Chapter 20 – Special Use Administration, Region 5 Supplement No. 2700-2021-1. Online. https://www.fs.usda.gov/im/directives/field/r5/fsm/2700/R5-2700-20-2021-1-3a.pdf. Site visited May 2025.

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ATTACHMENT 3.12-A: LAND USE PLANS AND POLICIES CONSISTENCY ANALYSIS

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ATTACHMENT 3.12-A: LAND USE PLANS AND POLICIES CONSISTENCY ANALYSIS

Plan or Policy	Consistent? (Yes/No)	Explanation
Southern California National Forests Land Management Plan (LMP) Part 1: Southern California National Forests Vision		
Strategic Goal 4.1a: Energy and Minerals Production. Administer minerals and energy resource development while protecting ecosystem health.	Yes	The San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) would improve system reliability and increase supply to meet the forecasted load related to electrification for SDG&E's customers. Therefore, the Proposed Project would be consistent with this goal.
Strategic Goal 7.1: Natural Areas in an Urban Context. Retain natural areas as a core for a regional network while focusing the built environmental into the minimum land area needed to support growing public needs.	Yes	Although the proposed 230 kV overhead (OH) segment would cross approximately three miles of land within the Cleveland Natural Forest (CNF), the Proposed Project would not conflict with the existing zoning or cause rezoning of forest land. Additionally, the Proposed Project would not impact any natural recreational areas. The Proposed Project would support the public need for electrification as determined by the California Independent System Operator (CAISO) while minimizing the development of natural areas. Therefore, the Proposed Project would be consistent with this goal.
National Strategic Plan Goal 4. Help meet energy resource needs.	Yes	The CAISO 2022-2023 Transmission Plan identified the need for the Proposed Project to upgrade the California electric grid to accommodate load growth. The Proposed Project would address CAISO-identified reliability constraints on existing SDG&E infrastructure. Therefore, the Proposed Project would be consistent with this goal.
Southern California National Forests LMP Part 2: Cleveland National Forest Strategy		
Criteria CNF S5. Consolidate major transportation and utility corridors by co-locating facilities and/or expanding existing corridors.	Yes	The Proposed Project would be located within or adjacent to existing utility corridors when feasible. The proposed 230 kV OH segment would parallel SDG&E's Sunrise Powerlink 500 kV transmission line south of the existing Suncrest Substation, then it would parallel SDG&E's Transmission Line (TL) 625 after crossing Japatul Road. Therefore, the Proposed Project would be consistent with this criterion.

Plan or Policy	Consistent? (Yes/No)	Explanation
Strategy LM 1: Landscape Aesthetics. Manage landscapes and built elements in order to achieve scenic integrity objectives. Also, use the best environmental design practices to harmonize changes in the landscape and to advance environmentally sustainable design solutions.	Yes	To preserve the scenic integrity of CNF land, SDG&E would restore the Proposed Project area and implement best design practices in accordance with Applicant-Proposed Measure (APM) AES-01, APM AES-02, APM AES-03, and APM AES-04. As per APM AES-01, temporary work areas would be restored to near pre-construction conditions in accordance with landowner agreements. As per APM AES-02, construction activities would be kept as clean and inconspicuous as practical, and storage and staging would be screened from close-range residential views with opaque fencing when practical. As per APM AES-03, non-specular conductors would be installed along the proposed 230 kV OH segment to minimize the reflectivity and general visibility of the Proposed Project. As per APM AES-04, any required lighting would be limited to individual work areas. With the implementation of these APMs, visual impacts to CNF land would be avoided or minimized. Therefore, the Proposed Project would be consistent with this strategy.
Strategy LM 2: Landscape Restoration. Restore landscapes to reduce visual effects of management activities and nonconforming features. Also, prioritize landscape restoration activities in key places (Aguanga, Elsinore, Laguna, Morena, Palomar Mountain, Pine Creek, San Dieguito/Black Mountain, San Mateo, Silverado, Sweetwater, and Upper San Diego River). Integrate restoration activities with other resource restoration.	Yes	While the Proposed Project is not located in these key places (i.e., Aguanga, Elsinore, Laguna, Morena, Palomar Mountain, Pine Creek, San Dieguito/Black Mountain, San Mateo, Silverado, or Upper San Diego River), the proposed 230 kV OH segment would cross Sweetwater Authority land for approximately 2.3 miles. To restore Proposed Project work areas in Sweetwater Authority land, SDG&E would implement APM AES-01, APM AES-02, APM AES-03, and APM AES-04. Temporary work areas would be restored to near pre-construction conditions in accordance with landowner agreements, and construction activities would be kept as clean and inconspicuous as practical. In addition, the Proposed Project would be constructed using non-specular conductors and limited lighting to reduce visual effects. Therefore, the Proposed Project would be consistent with this strategy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Strategy LM 3: Landscape Character. Maintain the character of National Forest System lands in order to preserve their intact nature, valued attributes, and open space. Maintain the integrity of the expansive, unencumbered landscapes and traditional cultural features that provide the distinctive character of places. Plan, design, and improve infrastructure along scenic travel routes to meet scenic integrity objectives.	Yes	As discussed in Section 3.3 Agriculture and Forestry of the Proposed Project EIR, vegetation removal would be limited to the minimum necessary for construction and operation and maintenance (O&M) activities. If vegetation removal occurs within forest land, SDG&E would perform restoration activities in accordance with the Proposed Project's Restoration Plan described in APM BIO-02 and Storm Water Pollution Prevention Plan. To maintain the integrity of traditional cultural features and resources, all SDG&E, contractor, and subcontractor personnel would receive training regarding the appropriate work practices necessary to comply with applicable environmental laws and regulations, including the potential for exposing subsurface cultural resources and paleontological resources, as described in APM BIO-05. A qualified archaeological monitor would monitor ground-disturbing activities in accordance with APM CUL-06. In the event that cultural resources are discovered, the archaeologist would have the authority to divert or temporarily halt ground disturbance to allow evaluation of potentially significant cultural resources, as per APM CUL-06. With the implementation of these APMs, the Proposed Project would be consistent with this strategy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Strategy Lands 2: Non-recreation Special Use Authorizations. Administer existing special-use authorizations in threatened, endangered, proposed, and candidate species habitats to ensure they avoid or minimize impacts to threatened, endangered, proposed and candidate species and their habitats; cultural and scenic resources; and open space values. Require special-use authorizations to maximize opportunities to co-locate facilities and minimize the encumbrance of National Forest System land. For special-use authorization holders operating within threatened, endangered, proposed, and candidate species key and occupied habitats, develop and provide information and education on the ways to avoid and minimize effects of their activities on occupied threatened, endangered, proposed, and candidate species habitat. Use signing, barriers, or other suitable measures to protect threatened, endangered, proposed, and candidate species in key and occupied habitats within the special-use authorization areas.	Yes	To avoid and minimize impacts to threatened, endangered, proposed, and candidate species and species habitats, SDG&E would implement avoidance and minimization measures described in APM BIO-01, APM BIO-02, APM BIO-04, and the species-specific APMs as necessary. Construction activities within suitable special-status species habitat that may impact sensitive biological resources would be monitored by a qualified biologist. In addition, all sensitive biological areas within the Proposed Project work area would be marked prior to construction to restrict construction activities and equipment from entering these areas, as described in APM BIO-04. A Restoration Plan would be prepared and submitted to the California Public Utilities Commission (CPUC) for approval prior to the start of construction activities. The plan would include procedures for restoration activities, procedures to reduce weed encroachment, and expected timeframes and success criteria for restoration. To avoid and minimize impacts to cultural and scenic resources, SDG&E would implement APM AES-01, APM AES-02, APM AES-03, APM AES-04, APM BIO-05, and APM CUL-06, which are described previously in the explanations for Strategy LM 1 and Strategy LM 3. The Proposed Project would be co-located where practical, with the proposed 230 kV OH segment paralleling SDG&E's Sunrise Powerlink 500 kV transmission line south of the existing Suncrest Substation, then paralleling SDG&E's TL625 after crossing Japatul Road. Therefore, the Proposed Project would be consistent with this strategy.
Strategy ME 1: Minerals Management. Manage minerals and energy resources commensurate with the conservation of forest resource values and the long-term health and biological diversity of ecosystems. Facilitate environmentally and culturally sensitive exploration, development, and production of mineral and energy resources on National Forest System land open to these activities, or on withdrawn lands consistent with valid existing rights, and integrate these activities with the planning and management of other resources.	Yes	As discussed in Section 3.13 Mineral Resources, no impact to the availability of a known mineral resource of value or locally important mineral resource recovery site delineated on the Southern California National Forests LMP would occur. In addition, the Proposed Project would not be located in any Mineral Resource Zones in the CNF. Therefore, the Proposed Project would be consistent with this strategy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Southern California National Forests LMP Part 3: Design Criteria for the Southern California National Forests		
When Implementing Lands and Special-Uses Activities Standard S42. Include provisions for raptor safety when issuing permits for new power lines and communication sites. Also implement these guidelines for existing permits within one year in identified high-use flyways of the California condor, and within five years in other high-use raptor flyways. Coordinate with California Department of Fish and Game, U.S. Fish & Wildlife Service, and power agencies to identify the high-use flyways.	Yes	To prevent avian electrocution from Proposed Project facilities and SDG&E power lines, the proposed 230 kV transmission line and modifications to the existing Suncrest Substation would be designed to adhere to the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, as described in APM BIO-17 (Avian Power Line Interaction Committee 2006, 2012). With the implementation of this measure, the Proposed Project would be consistent with this standard.
San Diego County General Plan		
Land Use Element Policy 5.3: Rural Land Preservation. Ensure the preservation of existing open space and rural areas (e.g., forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) when permitting development under the Rural and Semi-Rural Land Use Designations.	Yes	The proposed 230 kV OH segment, proposed 230 kV Underground (UG) segment, existing Suncrest Substation, proposed High Glen Staging Yard, and proposed High Glen Fly Yard would be located within Rural or Semi-Rural land use designations. The proposed 230 kV UG segment of the Proposed Project would primarily be installed within existing roadways and road shoulders, largely avoiding existing open space and rural areas. Temporary construction areas and staging areas would be located in previously disturbed areas to the extent feasible. In general, the temporary workspace required for construction would be limited to the road and road shoulder in urban areas, and would be up to 100 feet wide in cross-country areas. Where these temporary areas must be located within undisturbed open space, rural areas, agricultural lands, wildlife habitat, wetlands, watersheds, or groundwater recharge areas, temporary impacts would be kept to the minimum required to construct the Proposed Project. In addition, temporarily disturbed areas would be restored to pre-construction conditions upon Proposed Project completion to reduce any permanent impacts to existing open space and rural areas. Therefore, the Proposed Project would be consistent with this policy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Land Use Element Policy 6.1: Environmental Sustainability. Require the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment.	Yes	The Proposed Project would be located and designed with respect to the natural environment. SDG&E would avoid or minimize impacts to environmental resources, such as special-status species habitat and sensitive biological resources. As described in APM BIO-01, biological field surveys would be performed to identify vegetation communities and land cover, aquatic features, and potential terrestrial habitat for special-status plant and wildlife species. Sensitive biological resources or areas discovered during surveys would be subject to a buffer from construction activities in accordance with the applicable Proposed Project APMs. As previously discussed in the explanation for Strategy Land 2, a Restoration Plan would be developed as described in APM BIO-02 and would submitted to the CPUC for approval prior to construction. With the implementation of these measures, the Proposed Project would be consistent with this policy.
Land Use Element Policy 7.1 Agricultural Land Development. Protect agricultural lands with lower-density land use designations that support continued agricultural operations.	Yes	The majority of the Proposed Project would be installed within existing roads and road shoulders; therefore, impacts to agricultural lands would be minimized. As discussed in Section 3.3 Agriculture and Forestry, the Proposed Project would be located within land zoned as A70 and A72, which are agricultural land designations. However, these designations allow Minor Impact Utilities with issuance of a Minor Use Permit and Major Impact Services and Utilities with a Major Use Permit (County of San Diego 2011a). While the Proposed Project would be considered a Major Impact Utility, a Major Use Permit is not required for the Proposed Project because local jurisdictions are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities, pursuant to CPUC General Order 131-D. In addition, the Proposed Project would not require the conversion of agricultural land to non-agricultural use. Therefore, the Proposed Project would be consistent with this policy.
Land Use Element Policy 10.2 Development – Environmental Resource Relationship. Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.	Yes	Components of the Proposed Project have avoided unique natural features, sensitive and intact environmental areas, and hazardous areas when practicable. In addition, SDG&E would incorporate APM BIO-01 and APM BIO-04 to reduce impacts to these features and areas. SDG&E would minimize impacts to biologically sensitive areas by locating the majority of the alignment within existing paved roadways. Where the alignment would travel cross-country or where temporary impacts to natural habitat would occur, implementation of APM BIO-01 and APM BIO-04 would minimize impacts to sensitive biological resources. With the implementation of these measures, the Proposed Project would be consistent with this policy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Land Use Element Policy 12.3 Infrastructure and Services Compatibility. Provide public facilities and services that are sensitive to the environment with characteristics of the unincorporated communities. Encourage the collocation of infrastructure facilities, where appropriate.	Yes	The Proposed Project would be co-located with existing infrastructure where practicable. The proposed 230 kV western UG segment would be located within or parallel to SDG&E's existing 200-foot-wide easement and utility corridor on Crestridge Ecological Reserve, and within Vista de Montemar, a paved road. In addition, the proposed 230 kV OH segment would parallel SDG&E's Sunrise Powerlink 500 kV transmission line south of the existing Suncrest Substation, then it would parallel SDG&E's TL625 after crossing Japatul Road. The new overhead poles would be designed to be the minimum height necessary to meet current design standards, and poles would be soldered (i.e., located next to) or located in line with poles on adjacent existing transmission lines to reduce visual impacts when practicable. In addition, telecommunication lines would be collocated on the new poles. Therefore, the Proposed Project would be consistent with this policy.
Land Use Element Policy 12.4 Planning for Compatibility. Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas.	Yes	The CAISO 2022-2023 Transmission Plan identified the Proposed Project as a needed upgrade to the California electric grid to mitigate identified reliability constraints which were operational challenges and thermal overloads. While the County of San Diego- (County-) owned Stoneridge Preserve is located within 0.25 mile of the Proposed Project, no Proposed Project components are located within preserve areas. In addition, the Proposed Project has been designed to minimize visual and environmental impacts by installing the alignment underground and largely within existing paved roadways that are currently used for other public facilities. To further minimize visual impacts, SDG&E would implement APM AES-01, APM AES-02, APM AES-03, and APM AES-04, as previously described in the explanation for Strategy LM 2. As a result, the Proposed Project would be consistent with this policy.
Conservation and Open Space Element Policy 2.1: Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories.	Yes	Approximately 3.08 miles of the proposed 230 kV UG segment, approximately 5.48 miles of the proposed 230 kV OH segment, the existing Suncrest Substation, the proposed High Glen Staging Yard, and the proposed High Glen Fly Yard would be located within Rural and Semi-Rural Lands. However, SDG&E would avoid and minimize impacts to natural wildlife habitats in accordance with APM BIO-01. Temporary impacts would be kept to the minimum required to construct the Proposed Project, and temporarily disturbed areas would be restored to pre-construction conditions upon Proposed Project completion to reduce permanent impacts to natural habitats within lands designated as Semi-Rural and Rural Lands in accordance with APM BIO-02. Therefore, the Proposed Project would be consistent with this policy.

Plan or Policy	Consistent? (Yes/No)	Explanation
Alpine Community Plan		
Goal COS-3. Create an open space system that provides connectivity for the community and wildlife and provides buffers between open space and developments.	Yes	The 230 kV OH Segment is the only Proposed Project component located within Open Space land use designations and within the Alpine Community Plan. However, the Proposed Project does not involve new development and would not affect the open space system. Therefore, this policy is not applicable to the Proposed Project.
Policy COS-3.1. Encourage preservation/conservation of open space corridors that connect the community of Alpine to the following: • Cleveland National Forest • El Capitan and Loveland Reservoirs • Sweetwater River Basin	Yes	As discussed previously in the consistency analysis for the Southern California National Forests LMP, the 230 kV OH segment would cross approximately three miles of land within the CNF. However, the Proposed Project would not conflict with the existing zoning or cause rezoning of forest land. The Proposed Project would not conflict with any open space corridors that connect the Alpine community to the CNF, El Capitan and Loveland Reservoirs, and Sweetwater River Basin. Therefore, the Proposed Project is consistent with this policy.
Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan		
Goal LU 1.1. Develop land in a manner that reinforces the identity of the existing communities of Crest, Dehesa, Harbison Canyon, and Granite Hills, while maintaining each area's rural, rustic character.	Yes	The Proposed Project does not involve any new development, and SDG&E would implement APM AES-01, APM AES-02, APM AES-03, and APM AES-04, as previously described for Strategy LM 2, to minimize visual impacts from construction activities. As a result, the Proposed Project would be consistent with this policy
Policy LU 3.1.23. Discourage uses that are incompatible with the semirural residential character of Granite Hills.	Yes	The proposed 230 kV western UG segment and the Greenfield Staging Yard would be located within Granite Hills. The proposed 230 kV western UG segment would be installed underground and would not add aboveground features that conflict with the semirural residential character of Granite Hills. The Greenfield Staging Yard would be located on already disturbed land and would not result in new disturbed land. Therefore, new land use designations would not result from the Proposed Project, and the Proposed Project is consistent with this policy.

Plan or Policy	Consistent? (Yes/No)	Explanation
City of El Cajon General Plan		
Policy 8-2.2. The flat, valley portions of El Cajon shall receive the most intensive development[1]. Hillside areas shall receive less intensive development. Steep hillside areas (slopes more than 25%) shall be placed in the open space land use category.	Yes	The proposed Hospital Staging Yard is the only Proposed Project component in the City of El Cajon. The staging yard is located within an already developed area, and no construction activities would occur in undeveloped hillside areas. Therefore, the Proposed Project would be consistent with this policy.
Objective 13-1. El Cajon would solicit and encourage land uses and facilities which provide services on a region-wide basis.	Yes	The Proposed Project is in the eastern part of unincorporated San Diego County. The staging yard in the City of El Cajon would support the construction of the proposed 230 kV transmission line and the modification of the existing Suncrest Substation, which would improve system reliability for SDG&E's customers. Therefore, the Proposed Project would be consistent with this objective.

[1] The City of El Cajon Code of Ordinances defines development as "any manmade change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials" (City of El Cajon 2025b).

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3.13 MINERAL RESOURCES

This section describes the existing conditions for mineral resources in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential environmental impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.13.1 Environmental Setting

The Proposed Project would be located within San Diego County in California. Three general categories of important mineral resources occur within the County of San Diego's (County's) jurisdiction: construction materials, industrial and chemical mineral materials, and metallic and rare materials. Although mineral resources of all types are economically important, the continued availability of construction aggregate for the development of roads, homes, buildings, and other infrastructure is essential to the economy of the County (County of San Diego 2011). Mining operations that are near the Proposed Project generally produce construction-related minerals, such as sand and gravel. According to the County zoning geographical information systems (GIS) data, the Proposed Project would not cross any areas zoned for extractive mineral use.

The California Department of Conservation (DOC) Division of Mines and Geology developed guidelines for the classification and designation of mineral lands, known as Mineral Resource Zones (MRZs), and retains publications of the Surface Mining and Reclamation Act (SMARA) Mineral Land Classification Project dealing with mineral resources in California. According to the Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Western San Diego County Production-Consumption Region, California, approximately 7 miles of the Proposed Project alignment, west of Tavern Road, along with two staging yards west of the alignment, would lie within MRZ-3, illustrated in Figure 3.13-1: Mineral Resource Zones in the Proposed Project Area, which corresponds to areas containing known or inferred mineral occurrences of undetermined mineral resource significance (Busch and Miller 2017). The eastern portion of the Proposed Project (east of Tavern Road as depicted in Figure 3.13-1: Mineral Resource Zones in the Proposed Project Area), as well as the associated staging and fly yards, would lie within an area that has not yet received a mineral land classification and associated MRZ designation. MRZ definitions are provided in Table 3.13-1: Mineral Resource Zone Definitions, and the MRZ classifications in the Proposed Project Area are displayed in Figure 3.13-1: Mineral Resource Zones in the Proposed Project Area[1].

Due to ongoing development throughout the County and restricting land use types (e.g., conservation easements), few new mining sites have been permitted within the County in recent years (County of San Diego 2011). The closest mining operation to the Proposed Project alignment and associated work areas would be the Turvey Dg Pit (DOC Mine ID 91-37-0068), located adjacent to the south side of Interstate 8 and approximately 2.5 miles north of the proposed 230 kV underground segment (California DOC Division of Mineral Reclamation

[1] Fly yards would be used to support helicopter construction operations and include designated locations where helicopters can take off and land.

2025). The Turvey Dg Pit mines decomposed granite, rock and fill dirt, mainly used for construction purposes.

Table 3.13-1: Mineral Resource Zone Definitions

MRZ	Definition
MRZ-1	Areas where available geologic information indicates there is little likelihood for the presence of mineral resources.
MRZ-2	Areas where geologic information indicate that significant measured or indicated Portland Cement Concrete-grade aggregate resources are present.
MRZ-3	Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.
MRZ-4	Areas where geologic information does not rule out either the presence or absence of mineral resources.

Source: Busch, Laurence and Miller, Russel 2017

3.13.2 Regulatory Setting

3.13.2.1 Federal

No federal regulations related to mineral resources are relevant to the Proposed Project.

3.13.2.2 State

3.13.2.2.1 Surface Mining and Reclamation Act of 1975

The protection of regionally significant mineral resource deposits is one of the main emphases of the SMARA. The law specifically mandates a two-phased process, commonly referred to as classification and designation, for mineral resources. The California Geological Survey (CGS) is responsible for carrying out the classification phase of the process under SMARA. SMARA requires the State Geologist (i.e., the chief administrator of the CGS) to classify lands into MRZs based on the known or inferred mineral resource potential of that land. The State Mining and Geology Board is responsible for the second phase, which allows it to identify areas within a production-consumption region that contains significant deposits of certain mineral resources that may be needed to meet the region's future demand. The classification process is based solely on geology, without regard to land use or ownership. The primary goal of mineral land classification is to help ensure that the mineral resource potential of land is recognized and considered in the land use planning process.

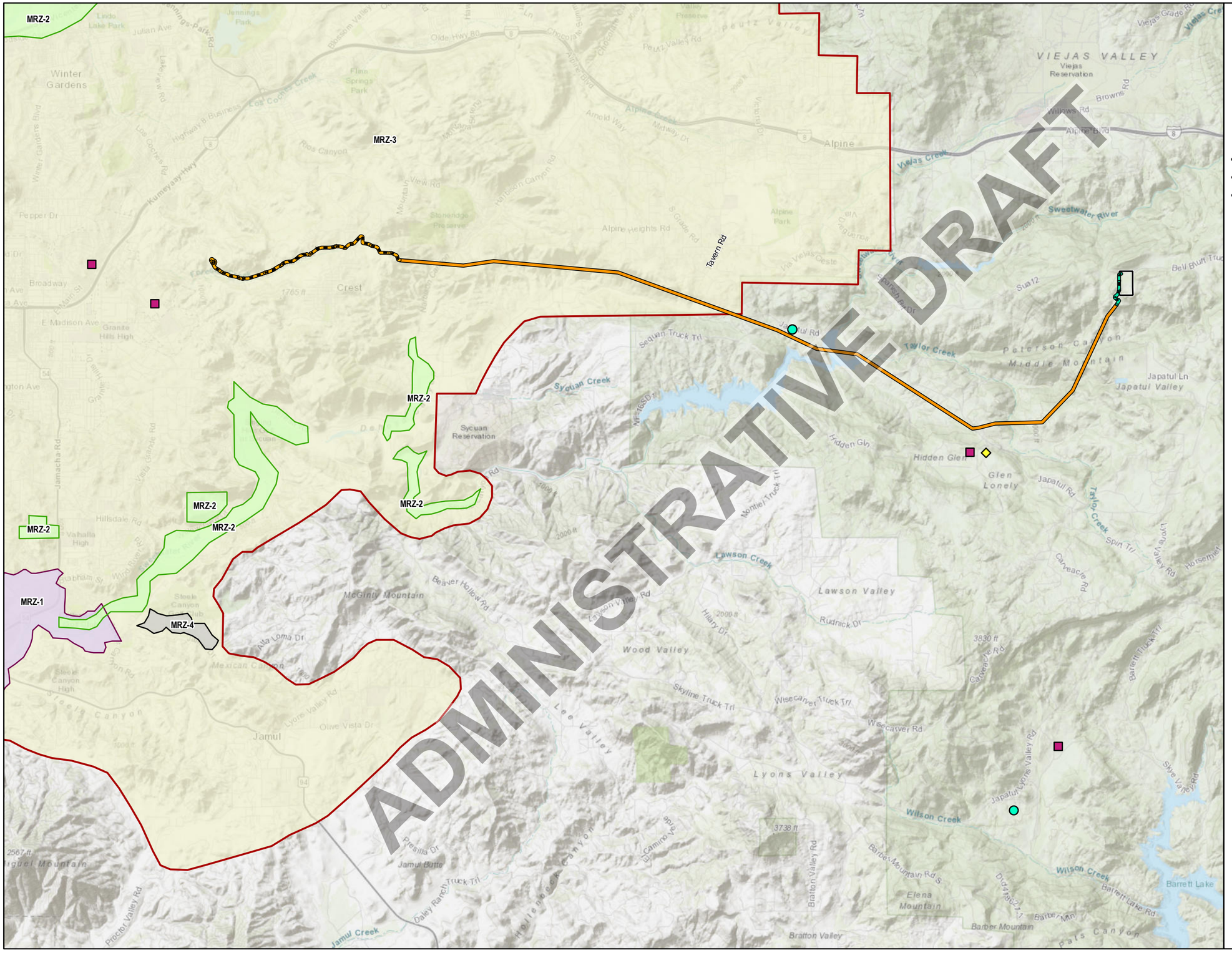

Figure 3.13-1:
Mineral Resource Zones
in the Proposed Project Area

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging Yard/Fly
- Proposed 230 kV Overhead Segment
- Proposed 230 kV Eastern Underground Segment
- Proposed 230 kV Western Underground Segment
- Existing Suncrest Substation

Mineral Resource Zone (MRZ)

- Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources (MRZ-1)
- Areas where geologic information indicates that significant measured or indicated Portland Cement Concrete-grade aggregate resources are present (MRZ-2)
- Areas containing known or inferred mineral occurrences of undetermined mineral resource significance (MRZ-3)
- Areas where available information is inadequate to assign to any other MRZ category (MRZ-4)

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3.13.2.3 Local

3.13.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan lists the following goals and policies that pertain to the conservation of mineral resources throughout its jurisdiction (County of San Diego 2011):

- **Goal COS-10: Protection of Mineral Resources.** The long-term production of mineral materials adequate to meet the local County average annual demand, while maintaining permitted reserves equivalent to a 50-year supply, using operational techniques and site reclamation methods consistent with SMARA standards such that adverse effects on surrounding land uses, public health, and the environment are minimized.

- **Policy COS-10.2: Protection of State-Classified or Designated Lands.** Discourage development or the establishment of other incompatible land uses on or adjacent to areas classified or designated by the State of California as having important mineral resources (MRZ-2, depicted in Figure 3.13-1: Mineral Resource Zones in the Proposed Project Area), as well as potential mineral lands identified by other government agencies. The potential for the extraction of substantial mineral resources from lands classified by the State of California as areas that contain mineral resources (MRZ-3, depicted in Figure 3.13-1: Mineral Resource Zones in the Proposed Project Area) shall be considered by the County in making land use decisions.

- **Policy COS-10.3: Road Access.** Prohibit development from restricting road access to existing mining facilities, areas classified MRZ-2 or MRZ-3 by the State Geologist, or areas identified in the County Zoning Ordinance for potential extractive use in accordance with SMARA section 2764.a.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed, and no policies relevant to the Proposed Project and mineral resources were identified (County of San Diego 2020).

3.13.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals or policies that pertain to the Proposed Project concerning mineral resources were identified (City of El Cajon 2000).

3.13.3 Impact Analysis and Mitigation Measures

3.13.3.1 Analysis Methodology

Impacts to mineral resources were determined based on information summarized in Section 3.13.1 Environmental Setting that was obtained from reviews of the following:

- the California DOC 2017 Mineral Land Classification Map;
- the California DOC 2015 Guidelines for Classification and Designation of Mineral Lands document;

- California DOC Division of Mine Reclamation mapping information; and
- local agency planning documents.

3.13.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to mineral resources.

3.13.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For mineral resources, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

3.13.3.4 Impact Analysis

3.13.3.4.1 Impact MIN-01: Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Construction, and Operations and Maintenance

No Impact. Approximately 7 miles of the proposed alignment west of Tavern Road, and two associated staging yards west of the alignment, would lie within lands designated as MRZ-3, which corresponds to areas containing known or inferred mineral occurrences of undetermined mineral resource significance; however, no active mines or designated extraction areas intersect the Proposed Project. The Turvey Dg Pit mining operation is situated within 5 miles of the Proposed Project, but no work areas or construction activity would intersect the mine. Further, the proposed 230 kV overhead segment east of Tavern Road, as well as associated staging and fly yards, are not located within an MRZ area. Consequently, no impact would occur.

3.13.3.4.2 Impact MIN-02: Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Construction, Operations and Maintenance

No Impact. As discussed previously in Section 3.13.1 Environmental Setting, the Proposed Project would not cross any areas zoned for extractive mineral use, according to the County's GIS zoning data. Consequently, no impact would occur.

3.13.4 References

Busch, Laurence and R. Miller. 2017. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Western San Diego County Production-Consumption Region, California. Online. https://www.conservation.ca.gov/cgs/documents/publications/special-reports/SR_240-MLC-WesternSanDiegoPCR-2017-Plate01-MRZs.pdf. Site visited April 2025.

California Department of Conservation (DOC). 2015. Guidelines for Classification and Designation of Mineral Lands. Online. https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf. Site visited April 2025.

California DOC Division of Mine Reclamation. 2025. Mines Online. Online. https://maps.conservation.ca.gov/mol/index.html. Site visited April 2025.

City of El Cajon. 2001. City of El Cajon General Plan 2000. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County of San Diego. 2020. Draft Alpine Community Plan. San Diego County General Plan Part XI. Online. https://www.sandiegocounty.gov/pds/gpupdate/docs/bos_oct2010/B2.01_alpine.cp_102010.pdf. Site visited November 2025.

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3.14 NOISE

This section describes the existing conditions for the noise environment in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.14.1 Environmental Setting

3.14.1.1 Noise Fundamentals

The terms "sound" and "noise" tend to be used interchangeably, but noise can be defined as unwanted sound, whereas sound is a normal and desirable part of life. However, when noise is imposed on people, it can lead to disturbance, annoyance, and other undesirable effects. Sound is physically characterized by amplitude and frequency. The amplitude of sound is measured in decibels (dB) as the logarithmic ratio of a sound pressure to a reference sound pressure (20 micropascals). The reference sound pressure corresponds to the typical threshold of human hearing. To the average listener, a 3 dB change in a continuous broadband sound is considered "just barely perceptible," a 5 dB change is considered "clearly noticeable," and a 10 dB change is considered a doubling (or halving if the sound is decreasing) of the apparent loudness and can cause an adverse response. Table 3.14-1: Typical Noise Levels Associated with a Variety of Sources summarizes the typical noise levels associated with certain activities, expressed in A-weighted decibels (dBA).

Table 3.14-1: Typical Noise Levels Associated with a Variety of Sources

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
--	110	Rock band
Jet flyover at 1,000 feet	100	--
Gas lawn mower at 3 feet	90	--
Diesel truck at 50 miles per hour	80	Food blender at 3 feet, garbage disposal at 3 feet
Noisy urban area, daytime, gas lawn mower at 100 feet	70	Vacuum cleaner at 10 feet, normal speech at 10 feet
Commercial area, heavy traffic at 300 feet	60	--
Quiet urban daytime	50	Large business office, dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library, bedroom at night
Quiet rural nighttime	20	--
--	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: California Department of Transportation (Caltrans) 2013

Sound waves can occur at different frequencies, which correspond to the sound's wavelength. Frequency is measured in hertz (Hz), which is the number of wave cycles per second that occur. The typical human ear can hear frequencies ranging from 20 to 20,000 Hz. Normally, the human ear is most sensitive to sounds in the middle frequencies (1,000 to 8,000 Hz) and is less sensitive to sounds in the lower and higher frequencies. As such, the A-weighting scale was developed to simulate the frequency response of the human ear to sounds at typical environmental levels. The A-weighting scale emphasizes sounds in the middle frequencies and de-emphasizes sounds in the low and high frequencies.

Any sound level to which the A-weighting scale has been applied is expressed in dBA. Sound can be characterized in terms of sound power level and sound pressure level. The sound power level is a measure of the total power radiated by a source. The sound power level is a fundamental property of the source and is independent of the surrounding environment. The sound pressure level is measured at a distance by a standard sound level meter with a microphone. This differs from the sound power level in that it is the received sound as opposed to the sound intensity at the source. A given level of noise may be more or less tolerable depending on the sound level, duration of exposure, character of the noise sources, time of day when the noise is experienced, and activity affected by the noise. For example, noise that occurs at night tends to be more disturbing than that which occurs during the day because sleep could potentially be disturbed.

Because sound in the environment often varies over time, statistical noise descriptors have been developed to quantify fluctuating environmental sound levels. The following indices are most common for measuring community noise levels:

- L_{eq}: The equivalent sound level is used to describe noise over a specified period of time, in terms of a single numerical value. The L_{eq} is the constant sound level, which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

- L_{dn} or DNL: The day-night noise level or the energy average of the A-weighted sound levels occurring during a 24-hour period, which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (i.e., "penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dBA to consider the greater annoyance of nighttime noises.

- CNEL: The Community Noise Equivalent Level, which is similar to the L_{dn}, adds a 5 dBA penalty for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to the 10 dBA penalty between the hours of 10:00 p.m. and 7:00 a.m.

- L_x: The sound level that is equaled or exceeded x percent of a specified time period. L_{50} represents the median sound level (i.e., the noise level exceeded 50 percent of the time, or 30 minutes out of an hour).

- L_{max}: The instantaneous maximum noise level measured during the measurement period of interest.

3.14.1.2 Corona Noise

Corona noise is the audible noise created when energy dissipates from electrical conductive equipment. As energy dissipates from electrical conductive equipment, some of the energy causes local pressure changes that result in audible noise, or in radio or television interference. The audible corona noise generated by corona discharge is characterized as a hissing or crackling sound that may be accompanied by a hum. Slight irregularities or water droplets on the conductor and/or insulator surface accentuate the electric field strength near the conductor surface, making corona discharge and the associated audible noise more likely. Therefore, corona noise from transmission lines is often pronounced after wet weather, when the transmission lines are wet and the noise from the weather event is over.

3.14.1.3 Vibration Fundamentals

Vibration is defined as any oscillatory motion induced in a structure or mechanical device as a direct result of some type of input excitation, such as forces, moments, or pressure fields. Vibration is transmitted through solid material, such as the ground by wave motion, giving rise to the terminology of "ground-borne" vibration. Ground-borne vibration propagates from sources, such as railways and impact-pile driving, through the ground into nearby structures and buildings. Soil properties affect the propagation of ground-borne vibration. The vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually occurs, but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as the rattling of windows or items on shelves or the motion of building surfaces. Vibration of building surfaces can also be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibrations transmitted from site activities to the neighborhood can cause anxiety and annoyance, and can disturb sleep, work, or leisure activities. Ground-borne vibration can be expressed in terms of vibration decibels (VdB), which is the vibration velocity level in decibel scale. Agencies such as the Federal Transit Administration (FTA) use VdB.

The FTA provides technical guidance for conducting noise and vibration analyses for transit projects and incorporation into the FTA's National Environmental Policy Act environmental review documents. The FTA's Transit Noise and Vibration Impact Assessment Manual presents procedures for predicting and assessing noise and vibration impacts of proposed transit projects, as well as direction regarding preparation of the information for the FTA's environmental documents, for different stages of project development and different levels of analysis (FTA 2018). Table 3.14-2: Human Response to Different Levels of Ground-Borne Vibration summarizes the human response to different levels of ground-borne vibration.

Table 3.14-3: Indoor Ground-Borne Vibration Impact Criteria for General Vibration Assessment presents the criteria for ground-borne vibration for Land Use Categories 1 through 3 in the FTA's Transit Noise and Vibration Impact Assessment Manual.

Table 3.14-2: Human Response to Different Levels of Ground-Borne Vibration

Vibration Velocity Level (VdB)	Human Response
65	Approximate threshold of perception for many humans.
75	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying.
85	Vibration tolerable only if there are an infrequent number of events per day.

Source: FTA 2018

Table 3.14-3: Indoor Ground-Borne Vibration Impact Criteria for General Vibration Assessment

Land Use Category	Ground-Borne Vibration (VdB re 1 micro-inch/second)[1]		
	Frequent Events	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: FTA 2018

Notes:

[1] VdB re 1 microinch/second = vibration decibels referenced to 1 microinch per second and based on the root mean square velocity amplitude.

3.14.1.4 Existing Noise Environment

3.14.1.4.1 Ambient Noise Environment

As summarized in the San Diego County General Plan, the most significant and pervasive source of noise in the county is traffic on the county's roadways. Traffic noises can be associated with automobiles, trucks, other vehicles, aircraft operations, and railroads. Additional non-transportation-related sources of noise result from industrial and commercial operations, maintenance, and manufacturing. The General Plan presents the 2007 noise contours as Figure N-1 and projected 2030 noise contours as Figure N-2 for major roadways, railroads, and airports. The roadways discussed in the following section can be found in Maps 3 through 11, 15, 30 through 35, and 39 through 46 of Attachment 2-A: Detailed Route Map in Section 2 Project Description.

Approximately 1.9 miles of the proposed 230 kV western underground (UG) segment would be located within La Cresta Road's 55 to 65 CNEL contour from 2007 and projected for 2030. Approximately 0.3 mile of the proposed 230 kV western UG segment would be located within Mountain View Road's projected 55 to 60 CNEL contour for 2030. A portion of the proposed 230 kV overhead (OH) segment would be approximately 0.4 mile south of Harbison Canyon Road's projected 55 to 60 CNEL contour for 2030. In addition, a portion of the proposed 230 kV

OH segment would be approximately 0.6 mile south of Tavern Road's projected 55 to 60 CNEL contour for 2030.

As shown in Figure 3.14-1: Existing Transmission Lines Parallel to the Proposed Project, the proposed 230 kV OH segment would parallel an existing SDG&E 500 kV transmission line (Sunrise Powerlink) from the existing Suncrest Substation to Japatul Road. From proposed Pole 24 to Pole 45—which can be found in Maps 34 through 46 of Attachment 2-A: Detailed Route Map in Section 2 Project Description—the proposed 230 kV OH segment would parallel an existing SDG&E 69 kV transmission line (TL625), which can be found in Figure 3.14-1: Existing Transmission Lines Parallel to the Proposed Project. An existing SDG&E transmission corridor traverses the western terminus of the proposed 230 kV western UG segment. SDG&E's existing O&M activities that periodically[1] generate noise in the Proposed Project Area include the following:

- use of four-wheel-drive vehicles, helicopters, boom trucks, and line trucks to access the existing transmission lines and poles;
- insulator washing activities;
- tree and vegetation trimming activities;
- access road maintenance; and
- hardware replacement and repair work.

In addition, the existing transmission lines generate corona noise. The CPUC has documented corona noise levels between 41 dBA and 66 dBA for a typical single-circuit 500 kV line during typical and worst-case weather conditions. For a typical double-circuit 230 kV line, corona noise levels have been calculated to range between 11 dBA and 36 dBA during typical and worst-case weather conditions.[2] (California Public Utilities Commission [CPUC] 2025)

The proposed Greenfield Staging Yard, which can be found in Map 62 of Attachment 2-A: Detailed Route Map in Section 2 Project Description, would be located within Greenfield Drive's 55 CNEL contour from 2007 and within the projected 60 to 65 CNEL contour for 2030. The proposed Lyons Valley Staging/Fly Yard, proposed Swat Staging Yard, proposed High Glen Staging Yard, proposed High Glen Fly Yard—which can be found in Maps 64 through 67 of Attachment 2-A: Detailed Route Map in Section 2 Project Description—and Sweetwater Staging/Fly Yard—which can be found in Map 35 of Attachment 2-A: Detailed Route Map in Section 2 Project Description—would not be located within a noise contour identified by the County of San Diego (County). The proposed Hospital Staging Yard—which can be found in Map 63 of Attachment 2-A: Detailed Route Map in Section 2 Project Description—would be located in the City of El Cajon, approximately 460 feet west of Interstate (I-) 8. Although the City of El Cajon (City) does not have a noise contour identified for I-8, based on the County-identified noise contour for I-8, the proposed Hospital Staging Yard would have the potential to be located in the 70 to 75 CNEL contour from 2007 and projected for 2030.

[1] These activities occur on an as-needed basis, but typically less than once per year or during an emergency response situation.

[2] For both the 500 kV and 230 kV lines, the minimum conductor ground clearance was assumed to be 32.8 feet.

3.14.1.4.2 Ambient Vibration Environment

The Proposed Project would not be located in an area that is currently subject to consistent sources of ground vibration. Although homes are located along La Cresta Road, these residences are not typically exposed to ground vibration because vehicles traveling on La Cresta Road are supported on flexible suspension systems and pneumatic tires. Therefore, vehicles do not generally create sources of vibration. However, vehicles impart vibration into the ground when they roll over pavement that is not smooth. Where discontinuities exist in the pavement, heavy truck passages can be the primary source of localized, intermittent vibration peaks. These peaks typically last no more than a few seconds and often for only a fraction of a second. Because vibration drops off rapidly with distance, there is rarely a cumulative increase in ground vibration from the presence of multiple trucks (Caltrans 2020).

3.14.1.4.3 Sensitive Receptors

Noise-sensitive land uses, or noise-sensitive receivers, are those land uses that are sensitive to loud or intrusive noise levels. Noise-sensitive receivers are associated with various land uses, including residences, hospitals, places of worship, libraries and schools, and parks. These land uses that contain noise-sensitive receivers are known as noise-sensitive land uses. The Proposed Project is located within a region predominantly occupied by undeveloped lands and residential areas.

As shown in Attachment 3.4-A: Sensitive Receptors within 1,000 Feet of the Proposed Project in Section 3.4 Air Quality, approximately 343 residences are located within 1,000 feet of the Proposed Project. Six residences are within 100 feet of the proposed 230 kV UG segment, and four residences are within 300 feet of the proposed 230 kV OH segment. For the underground portions of the Proposed Project, the nearest sensitive receptor is located in the vicinity of the proposed 230 kV western UG segment, as depicted on Map 3 of Attachment 3.4-A: Sensitive Receptors within 1,000 Feet of the Proposed Project in Section 3.4 Air Quality. The sensitive receptor nearest the proposed 230 kV OH segment is depicted on Map 10 of Attachment 3.4-A: Sensitive Receptors within 1,000 Feet of the Proposed Project in Section 3.4 Air Quality. The sensitive receptor nearest the proposed 230 kV western UG segment is located at a latitude of 32.8156 and longitude of -116.8616 and the sensitive receptor nearest the proposed 230 kV OH segment is located at a latitude of 32.7873 and longitude of -116.7297. The sensitive receptors nearest to the proposed 230 kV western UG segment and proposed 230 kV OH segment are located approximately 30 and 180 feet away, respectively.

3.14.2 Regulatory Setting

3.14.2.1 Federal

3.14.2.1.1 United States Environmental Protection Agency

No federal noise standards that directly regulate noise from the operation of electrical transmission lines and substation facilities exist. However, in 1974, the United States (U.S.) Environmental Protection Agency (EPA) established guidelines for noise levels, which were defined to protect public health and welfare with an adequate margin of safety. The U.S. EPA established criteria for protecting public health and well-being.

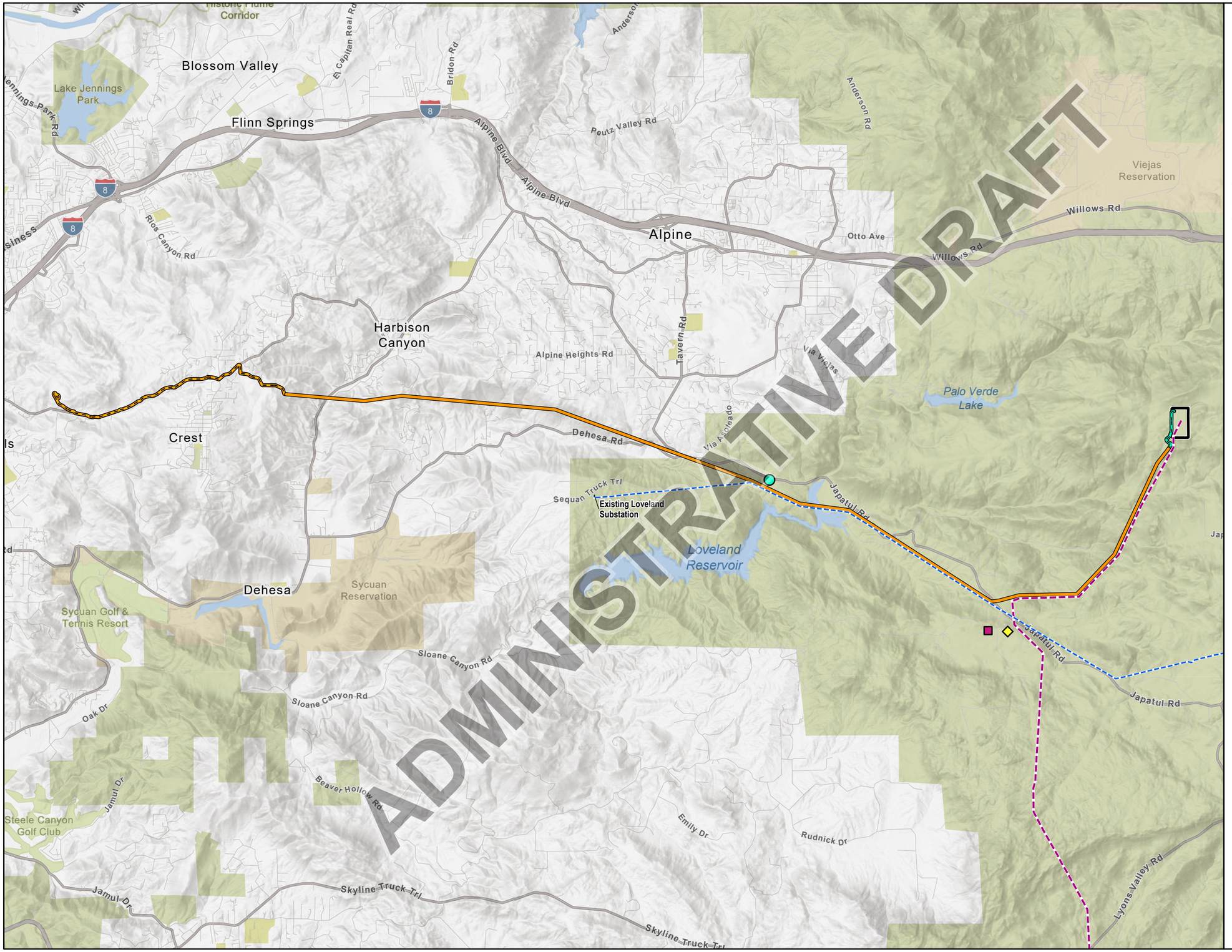

Figure 3-14-1:
Existing Transmission Lines Parallel to the Proposed Project

Suncrest
230 kV Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing SDG&E 500 kV Transmisson Line (Sunrise Powerlink)
- Existing SDG&E 69 kV Transmission Line (TL625)
- Existing Suncrest Substation

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The U.S. EPA guidelines recommend 55 dBA L_{dn} to protect the public from the effect of broadband environmental noise outdoors in residential areas, farms, other outdoor areas where people spend widely varying amounts of time, and other places where quiet is a basis for use (U.S. EPA 1974). However, these criteria do not constitute enforceable federal regulations or standards. Administrators of the U.S. EPA determined in 1981 that subjective issues, such as noise, would be better addressed at lower levels of government. Consequently, in 1982, responsibilities for regulating noise control policies were transferred to state and local governments. The U.S. EPA has since delegated regulatory authority to local entities.

3.14.2.2 State

3.14.2.2.1 California Health and Safety Code Sections 46000 through 46080

The California Health and Safety Code Sections 46000 through 46080, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare; and exposure to certain levels of noise can result in physiological, psychological, and economic damage. Section 46000 finds that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise.

3.14.2.2.2 California Government Code Section 65302

California Government Code Section 65302 encourages counties and cities to implement a noise element as part of the general plan. In addition, the California Governor's Office of Planning and Research has developed guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure.

3.14.2.2.3 California Department of Transportation and Construction-Induced Vibration Guidance

Caltrans provides practical guidance to engineers, planners, and consultants who must address vibration issues associated with the construction and O&M of Caltrans-related projects. The vibration criteria in Caltrans's Transportation and Construction Vibration Guidance Manual (Caltrans 2020) have been used to assess the effects of vibration during the Proposed Project construction.

3.14.2.3 Local

3.14.2.3.1 County of San Diego

San Diego County General Plan

The Noise Element of the San Diego County General Plan provides a basis for comprehensive local policies to control and abate environmental noise and to protect the community from excessive noise exposure. Table 3.14-4: County of San Diego Noise Compatibility Guidelines summarizes the County guidelines used to determine the compatibility of land use when evaluating proposed development projects.

Table 3.14-4: County of San Diego Noise Compatibility Guidelines

Land Use Category		Exterior Noise Level (CNEL)					
		50-55	55-60	60-65	65-70	70-75	75-80
A	Residential: single family residences, mobile homes, senior housing, convalescent homes	A	A	CA	CA	CA	U
B	Residential: multi-family residences, mixed-use (commercial/residential)	A	A	A	CA	CA	U
C	Transient lodging: motels, hotels, resorts	A	A	A	CA	CA	U
D*	Schools, churches, hospitals, nursing homes, childcare facilities	A	A	A	CA	CA	U
E*	Passive recreational parks, nature preserves, contemplative spaces, cemeteries	A	A	A	CA	CA	U
F*	Active parks, golf courses, athletic fields, outdoor spectator sports, water recreation	A	A	A	A	CA	U
G*	Office\professional, government, medical\dental, commercial, retail, laboratories	A	A	A	A	CA	U
H*	Industrial, manufacturing, utilities, agriculture, mining, stables, ranching, warehouse, maintenance/repair	A	A	A	A	CA	CA

Source: County of San Diego 2011

Notes:

* Denotes facilities used for part of the day; therefore, an hourly standard would be used rather than CNEL.

A – Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal construction, without any special noise insulation requirements.

CA – Conditionally Acceptable: New construction or development should be undertaken only after a detailed noise analysis is conducted to determine if noise reduction measures are necessary to achieve acceptable levels for land use. Criteria for determining exterior and interior noise levels are listed in Table 3.14-5: County of San Diego Noise Standards. If a project cannot mitigate noise to a level deemed Acceptable, the appropriate county decisionmaker must determine that mitigation has been provided to the greatest extent practicable or that extraordinary circumstances exist.

U – Unacceptable: New construction or development shall not be undertaken.

Table 3.14-5: County of San Diego Noise Standards

Standard Number	Standard
1	The exterior noise level standard for Category A will be 60 CNEL, and the interior noise level standard for indoor habitable rooms will be 45 CNEL.
2	The exterior noise level standard for Categories B and C will be 65 CNEL, and the interior noise level standard for indoor habitable rooms will be 45 CNEL.
3	The exterior noise level standard for Categories D and G will be 65 CNEL, and the interior noise level standard will be 50 dBA L_{eq} (1 hour average).
4	For single-family detached dwelling units, "exterior noise level" is defined as the noise level measured at an outdoor living area that adjoins and is on the same lot as the dwelling, and that contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area will include 400 square feet; (ii) for lots between 4,000 square feet and 10 acres in area, the exterior area will include 10 percent of the lot area; and (iii) for lots over 10 acres in area, the exterior area will include 1 acre.
5	For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard will be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to a public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.
6	For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.
7	For noise sensitive land uses where people normally do not sleep at night, the exterior and interior noise standard may be measured using either CNEL or the 1-hour average noise level determined at the loudest hour during the period when the facility is normally occupied.
8	The exterior noise standard does not apply for land uses where no exterior use area is proposed or necessary, such as a library.
9	For Categories E and F, the exterior noise level standard will not exceed the limit defined as "Acceptable" in Table 3.14-4: County of San Diego Noise Compatibility Guidelines or an equivalent 1-hour noise standard.

Source: County of San Diego 2011
Note: Exterior noise level compatibility guidelines for Land Use Categories A through H are identified in Table 3.14-4: County of San Diego Noise Compatibility Guidelines.

The San Diego County General Plan was reviewed and the following policies from the Noise Element are relevant to the Proposed Project (County of San Diego 2011):

- **Policy N-1.1: Noise Compatibility Guidelines.** Use the Noise Compatibility Guidelines (Table 3.14-4: County of San Diego Noise Compatibility Guidelines) and the Noise Standards (Table 3.14-5: County of San Diego Noise Standards) as a guide in determining the acceptability of exterior and interior noise for proposed land uses.

- **Policy N-1.2: Noise Management Strategies.** Require the following strategies as higher priorities than construction of conventional noise barriers where noise abatement is necessary:

  - Avoid placement of noise sensitive uses within noisy areas
  - Increase setbacks between noise generators and noise sensitive uses
  - Orient buildings such that the noise sensitive portions of a project are shielded from noise sources
  - Use sound-attenuating architectural design and building features
  - Employ technologies when appropriate that reduce noise generation (i.e. alternative pavement materials on roadways)

- **Policy N-2.1: Development Impacts to Noise Sensitive Land Uses.** Require an acoustical study to identify inappropriate noise level where development may directly result in any existing or future noise sensitive land uses being subject to noise levels equal to or greater than 60 CNEL and require mitigation for sensitive uses in compliance with the noise standards listed in Table 3.14-5: County of San Diego Noise Standards.

- **Policy N-3.1 Ground-borne Vibration.** Use the Federal Transit Administration and Federal Railroad Administration guidelines (Table 3.14-3: Indoor Ground-Borne Vibration Impact Criteria for General Vibration Assessment), where appropriate, to limit the extent of exposure that sensitive uses may have to ground-borne vibration from trains, construction equipment, and other sources.

Alpine Community Plan

The Draft Alpine Community Plan contains the following noise-related goals and policies that are relevant to the Proposed Project (County of San Diego 2020):

- **Goal N-1.** Maintain the tranquility of residential neighborhoods by reducing potential noise pollution.
- **Policy N-1.1.** Encourage land use and circulation patterns that will minimize noise in residential neighborhoods.

The previously mentioned goal and policy are being listed for informational purposes only.

County of San Diego Municipal Code

Division 6, Chapter 4 Noise Abatement and Control of the County Municipal Code outlines the noise standards that regulate noise in the unincorporated area of the county to promote the public

health, comfort, and convenience of the county's inhabitants and its visitors. As stated in Section 36.404, it is unlawful for any person to cause or allow the creation of any noise, which exceeds the 1-hour average sound level limits in Table 3.14-6: County of San Diego Sound Level Limits, when the 1-hour average sound level is measured at the property line where the noise is produced or at any location on a property that is receiving the noise. The sound level limits presented in Table 3.14-6: County of San Diego Sound Level Limits are used to establish thresholds of significance for analysis of noise-related impacts for O&M of the Proposed Project in Section 3.14.3.4 Impact Analysis.

Sections 36.408 and 36.409 of the County Municipal Code outline the construction noise standards for unincorporated San Diego County. As stated in Section 36.408, except for emergency work, it is unlawful for any person to operate construction equipment between 7:00 p.m. and 7:00 a.m. and/or on a Sunday or a holiday. Section 36.409 states that it is unlawful for any person to operate construction equipment that exceeds an average sound level of 75 dB for an 8-hour period, between 7:00 a.m. and 7:00 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received. This County Municipal Code is used to establish the threshold of significance for analysis of construction-related noise associated with the Proposed Project in Section 3.14.3.4 Impact Analysis.

In addition, Section 36.410 of the County Municipal Code outlines the sound level limitations on impulsive noise.[3] As stated in Section 36.410, except for emergency work or work on a public road project, no person will produce or cause an impulsive noise that exceeds the maximum sound level shown in Table 3.14-7: Maximum Sound Level (Impulsive) Measured at Occupied Property, when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is received, for 25 percent of the minutes in the measurement period.[4] The maximum sound level depends on the use being made of the occupied property. The sound level limits presented in Table 3.14-7: Maximum Sound Level (Impulsive) Measured at Occupied Property are used to establish thresholds of significance for analysis of impulsive noise related to construction and O&M for the Proposed Project in Section 3.14.3.4 Impact Analysis.

Section 36.417 of the County Municipal Code details the exemptions to the noise standards outlined in Chapter 4. Section 36.417(6) states that Chapter 4 does not apply to any activity preempted by state or federal law.

[3] Impulsive noise is a single noise event or a series of single noise events, which causes a high peak noise level of short duration (1 second or less) measured at a specific location. Examples include, but are not limited to a gunshot, an explosion, or a noise generated by construction equipment.

[4] The minimum measurement period for any measurements conducted under Section 36.410 is 1 hour. During the measurement period, a measurement will be conducted every minute from a fixed location on an occupied property. The measurements will measure the maximum sound level during each minute of the measurement period. If the sound level caused by construction equipment or the producer of the impulsive noise exceeds the maximum sound level for any portion of any minute, it will be deemed that the maximum sound level was exceeded during that minute.

Table 3.14-6: County of San Diego Sound Level Limits

Zone	Time	1-Hour Average Sound Level Limit (dBA)
RS, RD, RR, RMH, A70, A72, S80, S81, S90, S92, RV, and RU with a General Plan Land Use Designation density of less than 10.9 dwelling units per acre	7:00 a.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
RRO, RC, RM, S86, FB-V5, RV and RU with a General Plan Land Use Designation density of 10.9 or more dwelling units per acre	7:00 a.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
S94, FB-V4, AL-V2, AL-V1, AL-CD, RM-V5, RM-V4, RM-V3, RM-CD and all commercial zones	7:00 a.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	55
FB-V1, FB-V2, RM-V1, RM-V2	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
FB-V1, RM-V2	10:00 p.m. to 7:00 a.m.	55
FB-V2, RM-V1	10:00 p.m. to 7:00 a.m.	50
FB-V3	7:00 a.m. to 10:00 p.m.	70
	10:00 p.m. to 7:00 a.m.	65
M50, M52, and M54	Anytime	70
S82, M56, and M58	Anytime	75
S88	Dependent on Specific Planning Areas that allow different uses.	Dependent on Specific Planning Areas that allow different uses.

Source: County of San Diego 2025

Table 3.14-7: Maximum Sound Level (Impulsive) Measured at Occupied Property

Occupied Property Use	Maximum Sound Level (dBA)
Residential, village zoning, or civic use	82
Agricultural, commercial, or industrial use	85

Source: County of San Diego 2025
Note: Occupied property uses are described in the County zoning ordinance.

County of San Diego Guidelines for Determining Significance

The County Department of Planning and Land Use published guidelines for determining the significance of noise-sensitive uses affected by airborne noise. The guidelines state that a significant impact would occur if project implementation causes the exterior noise to exceed 60 dB CNEL or causes an increase of 10 dB CNEL over pre-existing noise levels at outdoor living areas or private usable open space. This guideline is provided for informational purposes only; the sound level limits presented in Table 3.14-6: County of San Diego Sound Level Limits are used to establish the thresholds of significance for O&M noise analysis in Section 3.14.3.4 Impact Analysis. As discussed previously in the County of San Diego Municipal Code Section, it is unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 decibels for an 8-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received (County of San Diego 2009). The previously mentioned guideline establishes the thresholds of significance for construction noise, which is used to analyze construction-related noise impacts for the Proposed Project in Section 3.14.3.4 Impact Analysis. In addition, the guidelines provide thresholds for ground-borne vibration and noise impacts based on the FTA's 2006 Transit Noise and Vibration Impact Assessment. These thresholds are summarized in Table 3.14-8: County Guidelines for Determining the Significance of Ground-Borne Vibration and Noise Impacts.

3.14.2.3.2 City of El Cajon

City of El Cajon General Plan

The City's 2000 General Plan includes policies aimed at reducing noise levels to protect the well-being of its residents. The following policies from the 2000 General Plan are relevant to the Proposed Project (City of El Cajon 2000):

- **Policy 8-3.8.** In order to minimize noise impacts from noise sources, the City may require site design considerations such as increased setbacks, sound attenuating walls and landscaping, and may also require building design considerations such as type of construction, insulation, and orientation of building openings.

- **Policy 8-4.4.** Where necessary, truck routes shall be established so as to reduce their effect on noise-sensitive land uses.

City of El Cajon Municipal Code

Section 17.115.130 of the City Municipal Code outlines the noise standards in the City. As stated in Section 17.115.130 (C)(1), noise that exceeds the sound levels indicated in Table 3.14-9: City of El Cajon Sound Level Limits are prohibited. As stated in Section 17.115.130 (C)(3), it is unlawful for any person within any residential zone, or within a radius of 500 feet from any residential zone, to operate equipment or perform any outside construction, maintenance, or repair work on buildings, structures, landscapes, or related facilities, or to operate any pile driver, power shovel, pneumatic hammer, power hoist, leaf blower, mower, or any other mechanical device, between the hours of 7:00 p.m. of one day and 7:00 a.m. of the next day in such a manner that a reasonable person of normal sensitivities residing in the area is caused discomfort or annoyance.

Table 3.14-8: County Guidelines for Determining the Significance of Ground-Borne Vibration and Noise Impacts

Land Use Category	Ground-borne Vibration Impact Levels (inches/sec rms[1])		Ground-borne Noise Impact Levels (dB re 20 micropascals[2])	
	Frequent Events[3]	Occasional or Infrequent Events[4]	Frequent Events[3]	Occasional or Infrequent Events[4]
Category 1: Buildings where low ambient vibration is essential for interior operations (research and manufacturing facilities with special vibration constraints)	0.0018[5]	0.0018[5]	Not Applicable (N/A)[6]	N/A[6]
Category 2: Residences and buildings where people normally sleep (hotels, hospitals, residences, and other sleeping facilities)	0.0040	0.010	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use (schools, churches, libraries, other institutions, and quiet offices)	0.0056	0.014	40 dBA	40 dBA

Source: County of San Diego 2009

Notes:

[1] "rms" is defined as root mean square.

[2] Noise levels in these columns are measured as the logarithmic ratio of a sound pressure to a reference sound pressure (20 micropascals).

[3] "Frequent Events" is defined as more than 70 vibration events per day. Most rapid transit projects fall into this category.

[4] "Occasional or Infrequent Events" are defined as fewer than 70 vibration events per day. This combined category includes most commuter rail systems.

[5] This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration sensitive manufacturing or research will require detailed evaluation to define acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

[6] There are some buildings (e.g., concert halls, TV and recording studios, and theaters) that can be very sensitive to vibration and noise but do not fit into any of the three categories.

Table 3.14-9: City of El Cajon Sound Level Limits

Zones	Time of Day	1-Hour Average Sound Level (dB)
All residentially zoned properties	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
All M-U and commercially zoned properties except the C-M zoned properties	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	55
All C-M and industrially zoned properties	Any time	75
	Conditionally[1]	80

Source: City of El Cajon 2025
Note:
[1] Where outdoor noise levels are higher, additional noise attenuation measures (e.g., earphones for workers, increased insulation, and double-pane glass) may make noise levels acceptable.

As stated in Section 17.115.130 (D), every use will be operated so that the ground vibration generated by such use is not harmful or injurious to the use or development of surrounding properties (City of El Cajon 2025). The previously discussed noise standards prescribed by the City are being provided for informational purposes only. Construction, as well as O&M, of the Proposed Project would not occur within the City of El Cajon. Therefore, no noise- or vibration-generating construction or maintenance equipment would operate within City of El Cajon or within 500 feet of a residential zone within the City of El Cajon.

3.14.3 Impact Analysis and Mitigation Measures

3.14.3.1 Analysis Methodology

This analysis applies the County's noise and vibration guidelines, discussed in the County of San Diego Municipal Code and County of San Diego Guidelines for Determining Significance subsections in Section 3.14.2.3.1 County of San Diego, to assist in determining the significance of noise impacts associated with the Proposed Project at sensitive receptors. Noise levels associated with construction of the Proposed Project have been calculated using the construction equipment noise list levels presented in Table 7-2 of the Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol (Caltrans 2013) and vibration levels associated with construction of the Proposed Project have been calculated using the construction equipment vibration levels list presented in Table 7-4 of the FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018). A detailed breakdown of the spreadsheet calculations can be found in Attachment 3.14-A: Noise and Vibration Calculations.

3.14.3.2 Applicant-Proposed Measures

The following applicant-proposed measure (APM) would be implemented for the Proposed Project:

- **APM NOI-01: Restrict Construction Work Periods.** Construction equipment operation will be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, and no construction operation will occur on Sundays or holidays. If construction activities are required outside of these hours, SDG&E will obtain written authorization from the County, as appropriate, to perform construction activities outside of the allowed hours stipulated in the applicable municipal ordinance. Official copies of the written authorization will be submitted to the California Public Utilities Commission (CPUC) before initiating any work outside the hours listed previously.

3.14.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the California Environmental Quality Act (CEQA) Appendix G Environmental Checklist. For noise, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

- Generate excessive ground-borne vibration or ground-borne noise levels?

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

3.14.3.4 Impact Analysis

3.14.3.4.1 Impact NOI-01: Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Less-than-Significant with Mitigation. CEQA defines short-term noise level increases from construction activities as significant impacts if the activities would conflict with local policies or standards. As discussed previously in the County of San Diego Municipal Code section, it is unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 dB for an 8-hour period, between 7:00 a.m. and 7:00 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received (County of San Diego 2009).

Approximately 159 construction personnel are expected to work each day during peak employment, generating approximately 177 round-trips[5] per day during peak construction of the Proposed Project. On average, construction of the Proposed Project is anticipated to result in approximately 85 round trips per day. Construction of the proposed 230 kV western UG segment, which is the construction activity that would occur closest to sensitive receptors, would result in approximately 46 round trips during peak employment. These construction trips would represent a negligible increase in vehicle trips in the vicinity of the Proposed Project, and therefore construction traffic noise in not anticipated to significantly increase traffic noise when compared to existing traffic noise levels.

The construction schedule and equipment list from Chapter 2 – Project Description was used to simulate the anticipated 8-hour average noise levels from construction. The anticipated noise level from each construction phase is shown in Table 3.14-10: Activity List and Noise Levels. This table also includes the distance at which the 75 dBA threshold for construction noise would be exceeded and the distance to the nearest noise-sensitive receptor for each construction activity. None of the construction activities in Table 3.14-10: Activity List and Noise Levels would be expected to occur concurrently near the same sensitive receptor.

As indicated in Table 3.14-10: Activity List and Noise Levels, the following seven construction activities would exceed the County's noise thresholds:

- utility locates,
- mobilization,
- trench excavation,
- duct bank and conduit installation,
- cable installation,
- paving, and
- underground site and right-of-way (ROW) restoration.

The maximum 8-hour noise level generated on-site during construction would be 89.4 dBA, which would occur during trench excavation for the proposed 230 kV western UG segment.

All of these activities would occur as part of construction of the proposed 230 kV western UG segment. Therefore, noise impacts from construction of the Proposed Project would be significant for residences within 160 feet of Vista De Montemar, La Cresta Road, Mountain View Road, Al Bahr Road, and/or Canyon Rim Drive. Additionally, although construction activities are planned to occur between 7:00 a.m. and 7:00 p.m., night work may be required in limited circumstances such as clearance restrictions, planned outages, and other factors that are beyond the control of the construction contractor. However, the implementation of APM NOI-01 would provide that construction of the Proposed Project conforms to the standards contained in the County's Noise Ordinance in instances where Proposed Project activities are required outside of typical construction hours. Under these circumstances (i.e., without mitigation), noise impacts resulting from construction of the Proposed Project would potentially still be significant.

[5] Peak vehicle trips would occur during the summer of 2028, from approximately June 2028 through August 2028 during site preparation for the proposed 230 kV OH segment.

Table 3.14-10: Activity List and Noise Levels[6]

Construction Activity	Average Leq (at 50 feet)	Approximate Distance to 75 dBA (feet)	Approximate Nearest Receptor Distance (feet)	8-Hour Average at Nearest Receptor (dBA)
Surveying and Staking (overhead)	47.0	--	180	35.9
Surveying and Staking (underground)	47.0	--	30	51.5
Utility Locates (overhead)	73.2	71.3	180	62.1
Utility Locates (underground)	73.2	71.3	30	77.7
Mobilization (overhead)	79.0	79.2	180	67.9
Mobilization (underground)	79.0	79.2	30	83.4
Access Road Construction	85.3	163.5	180	74.2
Conventional Structure Foundation Installation	85.0	158.6	180	73.9
Conventional Structure Installation	79.8	87.0	180	68.7
Helicopter Support[7]	90.0	396.9	300	74.4
Helicopter Landing Pad Construction	79.7	85.4	300	64.1
Helicopter Land Platform Construction	77.0	62.7	300	61.4
Helicopter Site Preparation	80.8	97.9	300	65.3
Helicopter Structure Foundation Installation	77.0	62.7	300	61.4
Helicopter Structure Installation	67.8	--	300	52.2
Conductor Installation	84.4	147.5	180	73.3
Excavate Trench	85.0	158.2	30	89.4
Duct Bank and Conduit Installation	83.7	136.6	30	88.2
Cable Installation	79.0	79.1	30	83.4
Paving	82.6	120.3	30	87.1
Site Preparation	81.0	100.0	2,540	46.9
Below-Grade Construction	86.8	195.2	2,540	52.7
Above-Grade Construction	84.0	141.1	2,540	49.9
Commissioning and Testing	75.2	51.1	180	64.1

[6] Shaded rows indicate construction activities that do not exceed the County's threshold of significance for 8-hour average noise levels.

[7] Based on noise level of a K-max helicopter flying at 100 feet above ground level during log-landing (USDA 2024); adjusted to noise levels at 50 feet and assumed a 50 percent usage factor.

Construction Activity	Average Leq (at 50 feet)	Approximate Distance to 75 dBA (feet)	Approximate Nearest Receptor Distance (feet)	8-Hour Average at Nearest Receptor (dBA)
Site and ROW Restoration (overhead)	84.0	140.9	180	72.9
Site and ROW Restoration (underground)	81.9	110.8	30	86.3

Sources: Caltrans 2013; United States Department of Agriculture (USDA) 2024.

The measures prescribed in mitigation measures (MM) NOI-01 would further reduce noise levels by preparing a Proposed Project-specific Noise Control Plan, which would include measures to address excessive noise, such as compensating residents for temporary relocation. While relocation would not reduce noise levels in the vicinity of construction activities, it would further reduce the severity of the impact where noise levels cannot be reduced to below 75 dBA on average over an 8-hour period. Similarly, according to the Federal Highway Administration (FHWA), effective noise barriers can reduce noise levels by up to 20 dBA (FHWA 2017). For example, temporary construction noise barriers produced by Soft dB provide up to 20 dBA of noise reduction; this would lower construction noise levels associated with the Proposed Project to below the County's noise ordinance (Soft dB 2025). The Noise Control Plan required by MM NOI-01 would outline several options for reducing noise levels, if determined necessary at the time of construction, to comply with the County's noise ordinance. Therefore, with the implementation of MM NOI-01 and APM NOI-01, noise impacts resulting from construction of the Proposed Project would be less than significant with mitigation.

The following MM is prescribed:

- **MM NOI-01: Construction Noise Reduction Measures.** Prior to the start of construction, the applicant would prepare and submit to the CPUC a Noise Control Plan, which would detail the frequency, location, and methodology for noise monitoring prior to and during the proposed construction activities, such as for activities within Vista De Montemar, La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive. The Noise Control Plan would also detail the actions and procedures that the applicant would implement to avoid significant impacts from temporary ambient noise increases. Measures in the Noise Control Plan would include, but not be limited to the following:

  - Reducing the number of pieces of equipment concurrently operating near sensitive receptors, as feasible.

  - Where feasible and available, using construction equipment specifically designed for low noise emissions (i.e., equipment that is powered by electric or natural gas engines instead of diesel or gasoline reciprocating engines). Electric engines have been reported to have lower noise levels than internal combustion engines.

  - Where safe and practical, placing a temporary noise barrier between residences and stationary noise-generating equipment during use.

  - The applicant would monitor construction noise levels in hourly equivalent averages $L_{eq}(h)$ before and during construction activities along the proposed 230 kV western UG segment with the potential to exceed the County's Noise Ordinance thresholds and where a variance has not been secured. During the Proposed Project construction period, noise measurements would be taken on a daily basis and reported to the CPUC on a monthly basis within 15 days of the end of the monitoring period.

  The applicant would submit the Noise Control Plan to the CPUC for review and approval at least 30 days prior to the start of Proposed Project construction. The applicant would

comply with all requirements of the approved Noise Control Plan whenever it applies during construction and maintenance activities for the Proposed Project.

Operations and Maintenance

Less-than-Significant Impact. Long-term O&M noise impacts would be considered significant if the Proposed Project-related noise would exceed the County's exterior noise standards, which are shown in Table 3.14-6: County of San Diego Sound Level Limits. The primary noise source associated with the operation of the existing Suncrest Substation would be the 500/230 kV transformer, which is a primary component of the modifications to the existing substation. The National Electrical Manufacturers Association's noise specifications estimate that 500/230 kV transformers generate noise levels ranging from 84 to 88 dBA when measured at the substation.

The nearest noise-sensitive receptor to the existing Suncrest Substation is a residence located approximately 2,540 feet away. In most cases when sound propagates over a long distance, the sound level would be attenuated by approximately 6 dBA for each doubling of distance from the source. As a result, the transformers are anticipated to generate 47.9 dBA at the nearest receptor. This value ignores the attenuation that would be provided by the other substation components, including firewalls and the boundary wall. At the nearest receptor, the transformer noise would be similar to ambient noise levels and would be below all applicable thresholds. As a result, noise impacts from operation of the existing Suncrest Substation would be less than significant.

The sound of corona is a phenomenon associated with all energized overhead electric power lines. Modern power lines are designed, constructed, and maintained so that, during dry conditions, they operate below the corona-inception voltage and generate a minimum of corona-related noise. Corona levels (and audible noise levels) are highest during heavy rain when the conductors are wet, but the noise generated by the rain is usually greater than the noise generated by corona. The Electric Power Research Institute has conducted several studies measuring the noise emissions from transmission line facilities due to corona. These studies have indicated that a 230 kV overhead transmission line would be expected to generate approximately 36 dBA directly below the line in foul weather. This noise would be generally below existing ambient levels at the nearest sensitive receptors and well below any applicable noise standards. Therefore, corona from the new 230 kV OH segment would not expose persons to or generate noise in excess of standards established in the San Diego County General Plan or the County's Noise Ordinance, or the applicable standards of other agencies. As a result, impacts from corona-related noise would be less than significant.

The proposed 230 kV western UG segment would be installed underground and would be inaudible during normal operation. Therefore, no noise impact would occur from the operation of the proposed 230 kV western UG segment.

Regular inspections at the existing Suncrest Substation and access roads would continue following the completion of Proposed Project construction. These include quarterly inspections, which would be performed to inspect equipment in accordance with manufacturer recommendations. Maintenance programs would continue for existing facilities and would be implemented for proposed facilities by SDG&E maintenance personnel or qualified contractors. In the event of an emergency (e.g., environmental conditions, vandalism, or accidents), emergency repair operations would involve deployment of SDG&E maintenance personnel or

qualified contractors as necessary to repair and/or replace damaged facilities. Routine maintenance of the proposed 230 kV transmission line is expected to require one trip per year by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. Noise levels resulting from maintenance activities in San Diego County would be brief and limited to where the work occurs. Therefore, no noise analysis for O&M was conducted as it is anticipated to be negligible. As a result, noise impacts from O&M activities would be less than significant.

3.14.3.4.2 Impact NOI-02: Would the project generate excessive ground-borne vibration or ground-borne noise levels?

Construction

Less-than-Significant Impact. The County's Guidelines for Determining Significance does not provide quantitative thresholds for determining the significance of ground-borne vibration levels associated with most construction activities.[8] Therefore, in accordance with Policy N-3.1 of the San Diego County General Plan, the thresholds provided in the FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018) were used to analyze the impacts of ground-borne vibrations that could result from construction of the Proposed Project.

No pile driving, blasting, or any other ground vibration-insensitive activities are proposed for use for construction of the Proposed Project. The six types of equipment that would most likely create vibration during construction of the Proposed Project (i.e., a small bulldozer, jackhammer, loaded trucks, large bulldozers, micropile drill, and a vibratory roller) generally produce lower levels of ground vibration. This construction equipment and the vibration levels, in PPV, associated with the use of the equipment is presented in Table 3.14-11: Construction Equipment Vibration Levels. The use of a vibratory roller during paving activities is the activity that would result in the most ground-borne vibration during construction. Vibratory rollers generate ground-borne vibration levels of 0.21 inch per second PPV at 25 feet; and the FTA's threshold of significance is 0.2 inch per second PPV for building structural damage (non-engineered timber and masonry buildings) (FTA 2018). As presented in Table 3.14-11: Construction Equipment Vibration Levels, a vibratory roller would produce a PPV of 0.159 at the nearest sensitive receptor. Therefore, ground-borne vibration from the use of a vibratory roller would not exceed the threshold of significance established in the FTA's Transit Noise and Vibration Impact Assessment Manual. Re-paving Vista De Montemar, La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive would require the use of a vibratory roller after installation of the underground duct bank, and the closest sensitive receptor would be 30 feet from this activity along Mountain View Road. Therefore, construction-related vibration and ground-borne noise associated with the Proposed Project would result in a less-than-significant impact.

[8] The County guidelines indicate that non-transportation vibration sources (e.g., impact pile drivers or hydraulic breakers) would be significant when their peak particle velocity (PPV) exceeds 0.1 inch per second.

Table 3.14-11: Construction Equipment Vibration Levels

Equipment	PPV at 25 Feet (inches/second)	Approximate Nearest Receptor Distance (feet)	PPV at Nearest Receptor
Small Bulldozer	0.003	30	0.002
Micropile Drill[9]	0.089	180	0.004
Jackhammer	0.035	30	0.027
Loaded Truck	0.076	30	0.058
Large Bulldozer	0.089	30	0.068
Vibratory Roller	0.21	30	0.159

Source: FTA 2018.

Operations and Maintenance

No Impact. O&M activities associated with the Proposed Project would not involve the use of any large rotating equipment or heavy machinery that would introduce any new sources of perceivable ground-borne vibration. Likewise, corona noise does not cause perceivable ground-borne vibration. Therefore, O&M activities have no potential to generate ground-borne vibration levels greater than the significance criteria established by the County in Table 3.14-8: County Guidelines for Determining the Significance of Ground-Borne Vibration and Noise Impacts, and there would be no impact.

3.14.3.4.3 Impact NOI-03: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

Construction, Operations and Maintenance

No Impact. The Proposed Project would not be located within the vicinity of a private airstrip or within 2 miles of a public airport or public use airport. Therefore, the Proposed Project would not expose people residing or working at the site to excessive noise levels from aircraft. As a result, no impact would occur.

3.14.4 References

Caltrans. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. Online. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Site visited October 2025.

[9] The micropile drill PPV reflects the FTA's vibration source level for caisson drilling, which is being used as a proxy for micropile drilling.

Caltrans. 2020. Transportation and Construction Vibration Guidance Manual. Online. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Site visited April 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

City of El Cajon. 2025. Municipal Code, Section 17.115.130. Online. https://ecode360.com/44374836?searchId=4981644241454088&highlight=noise&highlight=disturbs+the+peace#44374836. Site visited August 2025.

County of San Diego. 2009. Guidelines for Determining Significance – Noise. Online. https://www.sandiegocounty.gov/content/dam/sdc/dplu/docs/Noise-Guidelines.pdf. Site visited May 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County of San Diego. 2020. Alpine Draft Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited December 2025.

County of San Diego. 2025. Code of Regulatory Ordinances, Chapter 4. Noise Abatement and Control, Article 9.5. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-76117. Site visited April 2025.

CPUC. 2025. LS Power Grid California Manning 500/230 Kilovolt Substation Project Final Initial Study/Mitigated Negative Declaration. Online. https://ascent.inc/wp-content/uploads/2025/06/Manning_Final_IS-MND.pdf. Site visited April 2026.

FHWA. 2017. Highway Traffic Noise Analysis and Abatement Policy and Guidance. Online. https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide05.cfm. Site visited December 2025.

FTA. 2018. Transit Noise and Vibration Impact Assessment Manual. Online. https://www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123. Site visited April 2025.

Soft dB. 2025. Temporary Noise Barrier for Construction Sites. Online. https://www.softdb.com/soundproofing/construction-temporary-noise-barrier/. Site visited December 2025.

USDA. 2024. Sound Measurements of Helicopters During Logging Operations. Online. https://www.fs.usda.gov/t-d/programs/im/sound_measure/helo_conclusions.shtml. Site visited December 2025.

U.S. EPA. 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. Online. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000L3LN.txt. Site visited April 2025.

U.S. EPA. 1977. Noise Training Manual. Online. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=9100633T.txt. Site visited October 2025.

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ATTACHMENT 3.14-A: NOISE AND VIBRATION CALCULATIONS

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Table 1: Reference Levels

Noise Category	Impact Device?	Use Factor	Noise Spec	Measured Noise	Sample Count
All Other Equipment > 5 HP	No	50	85	N/A	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	N/A	0
Blasting	Yes	N/A	94	N/A	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	N/A	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS Signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	N/A	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydraulic Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	N/A	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarifier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	40	55	75	1
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/Chipping Gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (single nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Sheers (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	N/A	0
Tractor	No	40	84	N/A	0
Vacuum Excavator (Vac-Truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5
Helicopter – Heavy Duty (3,200 HP)	No	50	106		
Helicopter – Light Duty (700 HP)	No	50	101		

Source: http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

Table 2: Equipment Categorization

Equipment Name	HP	Noise Category	Noise Level (dBA at 50 feet)	Use Factor
LoDrill	221	Auger Drill Rig	85	20
Crane	231	Crane	85	16
Flatbed Truck	350	Flat Bed Truck	84	40
Concrete Truck	425	Concrete Mixer Truck	85	40
Worker Commute	NA	Pickup Truck	55	40
Haul Truck	425	Dump Truck	84	40
Ready Mix Truck	NA	Concrete Mixer Truck	85	40
Pickup Truck - 1/2 ton	395	Pickup Truck	55	40
Bucket or Boom Truck	402	Man Lift	85	20
Line Truck	402	Man Lift	85	20
Boom Truck	150	Crane	85	16
Bucket Truck	402	Man Lift	85	20
Dump Truck	415	Dump Truck	84	40
Excavator	250	Excavator	85	40
Line Truck with Auger	402	Auger Drill Rig	85	20
V-Groove	172	All Other Equipment > 5 HP	85	50
Tensioner	172	All Other Equipment > 5 HP	85	50
Forklift	100	Front End Loader	80	40
Sagging Cat	97	All Other Equipment > 5 HP	85	50
Water Truck	300	Dump Truck	84	40
Motor Grader	250	Grader	85	40
Skid Steer Loader	74	Front End Loader	80	40
Generator	45	Generator (<25KVA, VMS Sign	70	50
Air Compressor 340/390hp	390	Compressor (air)	80	40
Generator 150-260 kW	260	Generator	82	50
D6 Type Dozer	250	Dozer	85	40
Vibratory Roller	125	Roller	85	20
All other equipment > 5 hp	NA	All other equipment > 5 hp	85	50
Jackhammer	NA	Jackhammer	85	20
Backhoe	150	Backhoe	80	40
Concrete Saw	13	Concrete Saw	90	20
Loader	230	Front End Loader	80	40
Trackhoe	250	Excavator	85	40
Trencher	75	Excavator	85	40
Backhoe	150	Backhoe	80	40
Heavy-Duty Helicopter	3200	Helicopter – Heavy Duty (3,20	106	50
Helicopter	700	Helicopter – Light Duty (700 H	101	50
Hydroseed Truck	402	Dump Truck	84	40
Tool - Van/Conex 20'	NA	Pickup Truck	55	40
Excavator	75	Excavator	85	40
Light plant	0	Exempt	0	0
Water holding tanks	0	Exempt	0	0
Fire Deck (5 hp pump)	5	Pumps	77	50

Equipment Name	HP	Noise Category	Noise Level (dBA at 50 feet)	Use Factor
Water Buffalo Deck (5 hp pum	5	Pumps	77	50
Testing Jack (5 hp pump)	5	Pumps	77	50
Refueler (small fuel transfer s	5	Pumps	77	50
Grout Plant	5	Pumps	77	50
Arrow Board	0	Exempt	0	0
Bitumen (emulsion) sprayer, t	0	Exempt	0	0
Excavator	250	Excavator	85	40
Pickup Truck - 1 ton	410	Pickup Truck	55	40
Road Grader	250	Grader	85	40
Mower	48	All Other Equipment > 5 HP	85	50
844 Loader	417	Front End Loader	80	40
Jet Fuel Truck	300	Dump Truck	84	40
Vibrating Plate	14	All Other Equipment > 5 HP	85	50
Micropile Drill Power Unit	310	Auger Drill Rig	85	20
Chipper	50	All Other Equipment > 5 HP	85	50
Wire Puller	250	All Other Equipment > 5 HP	85	50
Wire Trailer/Tensioner	250	All Other Equipment > 5 HP	85	50
Hydraulic Pole Puller	150	All Other Equipment > 5 HP	85	50
Cable Reel	175	All Other Equipment > 5 HP	85	50
Pulling Rig	175	All Other Equipment > 5 HP	85	50
Grinder	15	All Other Equipment > 5 HP	85	50
Excavator - Mini	108	All Other Equipment > 5 HP	85	50
Welding Truck	250	Dump Truck	84	40
Hydroseed Truck	402	Dump Truck	84	40
Forklift - 10k Reach	130	Front End Loader	80	40
Forklift - 15k Reach	130	Front End Loader	80	40
Gang Truck	350	Pickup Truck	55	40
Bulldozer	250	Dozer	85	40
Loader	250	Front End Loader	80	40
Compressor	24	Compressor (air)	80	40
Pressure Digger - Lo-Drill (Trac	275	Auger Drill Rig	85	20
Crane - 35 Ton (Manlift)	250	Man Lift	85	20
Rough Terrain Crane	185	Crane	85	16
Crane - 200 Ton	275	Crane	85	16
Generator 25 kW	36	Generator (<25KVA, VMS Sign	70	50
D8 Sag Dozer	200	Dozer	85	40
Boom truck w/ hydraulic pole	150	Crane	85	16
Foreman Truck	300	Pickup Truck	55	40
A/C Roller 5-7 Ton	74	Roller	85	20
Backhoe - 2x4	68	Backhoe	80	40
120' Manlift	74	Man Lift	85	20

Table 3: Equipment List and Average Power

Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Project Quantity	Days Used	Project Wide Hours per Day	Site Specific Hours Per Day	Site Quantity	Site Hours	Noise Level (Leq at 50 feet)	Use Factor	Total Use Factor	Adjusted Noise Level (Leq at 50 feet)	Average Leq (at 50 feet)	Average Power	Equipment Name and Quantity	Output
L-01	Survey and Staking	Pickup Truck - 1/2 ton	395	Gasoline	2	871	8	2	2	2	55	40	0.08	44.0	47.0	50596.44256	Pickup Truck - 1/2 ton (2)	47.0
L-02	Utility Locates	Air Compressor 340/390hp	390	Diesel	1	1052	8	2	1	2	80	40	0.08	69.0	69.0	8000000	Air Compressor 340/390hp (1)	69.0
L-02	Utility Locates	Backhoe	150	Diesel	2	1052	8	2	1	2	80	40	0.08	69.0	69.0	8000000	Backhoe (2)	69.0
L-02	Utility Locates	Flatbed Truck	350	Diesel	2	1052	10	0.5	1	0.5	84	40	0.02	67.0	67.0	5023772.863	Flatbed Truck (2)	67.0
L-02	Utility Locates	Pickup Truck - 1 ton	410	Diesel	2	1052	10	0.5	2	0.5	55	40	0.02	38.0	41.0	12649.11064	Pickup Truck - 1 ton (2)	41.0
L-03	Mobilization	Backhoe	150	Diesel	2	47	6	1	2	1	80	40	0.04	66.0	69.0	8000000	Backhoe (2)	69.0
L-03	Mobilization	Boom truck	150	Diesel	1	47	3	1	1	1	85	16	0.016	67.0	67.0	5059644.256	Boom truck (1)	67.0
L-03	Mobilization	Flatbed truck	350	Diesel	1	47	10	1	1	1	84	40	0.04	70.0	70.0	10047545.73	Flatbed truck (1)	70.0
L-03	Mobilization	Flatbed truck	350	Diesel	2	47	3	1	2	1	84	40	0.04	70.0	73.0	20095091.45	Flatbed truck (2)	73.0
L-03	Mobilization	Forklift	100	Diesel	2	47	8	1	2	1	80	40	0.04	66.0	69.0	8000000	Forklift (2)	69.0
L-03	Mobilization	Gang Truck	350	Diesel	2	47	8	1	2	1	55	40	0.04	41.0	44.0	25298.22128	Gang Truck (2)	44.0
L-03	Mobilization	Generator 150-260 kW	260	Diesel	1	47	10	1	1	1	82	50	0.05	69.0	69.0	7924465.962	Generator 150-260 kW (1)	69.0
L-03	Mobilization	Light plant	0	Diesel	4	47	2	1	4	1	0	0	0	0.0	6.0	0	Light plant (4)	6.0
L-03	Mobilization	Pickup Truck - 1 ton	410	Diesel	2	47	2	1	4	1	55	40	0.04	41.0	47.0	50596.44256	Pickup Truck - 1 ton (2)	47.0
L-03	Mobilization	Water holding tanks	0	Diesel	2	47	10	1	2	1	0	0	0	0.0	3.0	0	Water holding tanks (2)	3.0
L-03	Mobilization	Water truck	300	Diesel	2	47	10	1	2	1	84	40	0.04	70.0	73.0	20095091.45	Water truck (2)	73.0
L-04	Access Road Construction	Bulldozer	250	Diesel	1	203	6	2	1	2	85	40	0.08	74.0	74.0	25298221.28	Bulldozer (1)	74.0
L-04	Access Road Construction	D6 Type Dozer	250	Diesel	1	203	6	2	1	2	85	40	0.08	74.0	74.0	25298221.28	D6 Type Dozer (1)	74.0
L-04	Access Road Construction	Dump Truck	415	Diesel	3	203	10	2	3	2	84	40	0.08	73.0	77.8	60285274.36	Dump Truck (3)	77.8
L-04	Access Road Construction	Excavator	250	Diesel	2	203	4	2	2	2	85	40	0.08	74.0	77.0	50596442.56	Excavator (2)	77.0
L-04	Access Road Construction	Loader	250	Diesel	1	203	2	2	1	2	80	40	0.08	69.0	69.0	8000000	Loader (1)	69.0
L-04	Access Road Construction	Motor Grader	250	Diesel	2	203	6	2	2	2	85	40	0.08	74.0	77.0	50596442.56	Motor Grader (2)	77.0
L-04	Access Road Construction	Mower	48	Diesel	1	203	3	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Mower (1)	75.0
L-04	Access Road Construction	Pickup Truck - 1 ton	410	Diesel	4	203	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-04	Access Road Construction	Pickup Truck - 1/2 ton	395	Gasoline	2	203	2	2	2	2	55	40	0.08	44.0	47.0	50596.44256	Pickup Truck - 1/2 ton (2)	47.0
L-04	Access Road Construction	Road Grader	250	Diesel	1	203	6	2	1	2	85	40	0.08	74.0	74.0	25298221.28	Road Grader (1)	74.0
L-04	Access Road Construction	Skid Steer Loader	74	Diesel	1	203	4	2	1	2	80	40	0.08	69.0	69.0	8000000	Skid Steer Loader (1)	69.0
L-04	Access Road Construction	Vibratory Roller	125	Diesel	1	203	4	2	1	2	85	20	0.04	71.0	71.0	12649110.64	Vibratory Roller (1)	71.0
L-04	Access Road Construction	Water Truck	300	Diesel	2	203	6	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Water Truck (2)	76.0
L-05	Conventional Structure Foundation Installation	844 Loader	417	Diesel	1	303	6	3	1	3	80	40	0.12	70.8	70.8	12000000	844 Loader (1)	70.8
L-05	Conventional Structure Foundation Installation	Boom truck	150	Diesel	1	303	3	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Boom truck (1)	70.1
L-05	Conventional Structure Foundation Installation	Compressor	24	Diesel	1	303	6	4	1	4	80	40	0.16	72.0	72.0	16000000	Compressor (1)	72.0
L-05	Conventional Structure Foundation Installation	Concrete Truck	425	Diesel	4	303	5	2	4	2	85	40	0.08	74.0	80.1	101192885.1	Concrete Truck (4)	80.1
L-05	Conventional Structure Foundation Installation	Crane - 35 Ton (Manlift)	250	Diesel	2	303	5	2	2	2	85	20	0.04	71.0	74.0	25298221.28	Crane - 35 Ton (Manlift) (2)	74.0
L-05	Conventional Structure Foundation Installation	Dump Truck	415	Diesel	3	303	10	2	3	2	84	40	0.08	73.0	77.8	60285274.36	Dump Truck (3)	77.8
L-05	Conventional Structure Foundation Installation	Forklift - 10k Reach	130	Diesel	2	303	2	2	2	2	80	40	0.08	69.0	72.0	16000000	Forklift - 10k Reach (2)	72.0
L-05	Conventional Structure Foundation Installation	Pickup Truck - 1 ton	410	Diesel	4	303	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-05	Conventional Structure Foundation Installation	Pressure Digger - Lo-Drill (Tracked)	275	Diesel	1	303	8	3	1	3	85	20	0.06	72.8	72.8	18973665.96	Pressure Digger - Lo-Drill (Tracke	72.8
L-05	Conventional Structure Foundation Installation	Rough Terrain Crane	185	Diesel	1	303	6	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Rough Terrain Crane (1)	70.1
L-05	Conventional Structure Foundation Installation	Skid Steer Loader	74	Diesel	1	303	6	2	1	2	80	40	0.08	69.0	69.0	8000000	Skid Steer Loader (1)	69.0
L-05	Conventional Structure Foundation Installation	Water truck	300	Diesel	2	303	6	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Water truck (2)	76.0
L-06	Conventional Structure Installation	844 Loader	417	Diesel	1	252	6	3	1	3	80	40	0.12	70.8	70.8	12000000	844 Loader (1)	70.8
L-06	Conventional Structure Installation	Crane - 200 Ton	275	Diesel	1	252	4	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Crane - 200 Ton (1)	70.1
L-06	Conventional Structure Installation	Crane - 35 Ton (Manlift)	250	Diesel	2	252	2	2	2	2	85	20	0.04	71.0	74.0	25298221.28	Crane - 35 Ton (Manlift) (2)	74.0
L-06	Conventional Structure Installation	Forklift - 15k Reach	130	Diesel	1	252	1	2	1	2	80	40	0.08	69.0	69.0	8000000	Forklift - 15k Reach (1)	69.0
L-06	Conventional Structure Installation	Pickup Truck - 1 ton	410	Diesel	4	252	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-06	Conventional Structure Installation	Pickup Truck - 1/2 ton	395	Gasoline	4	252	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1/2 ton (4)	50.1
L-06	Conventional Structure Installation	Water Truck	300	Diesel	2	252	6	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Water Truck (2)	76.0
L-07	Helicopter Support	Heavy-Duty Helicopter	3200	Jet	1	239	2	0.5	1	0.5	106	50	0.025	90.0	90.0	995267926.4	Heavy-Duty Helicopter (1)	90.0
L-07	Helicopter Support	Helicopter	700	Jet	1	239	4	0	1	0	101	50	0	0.0	0.0	0	Helicopter (1)	0.0
L-07	Helicopter Support	Jet Fuel Truck	300	Diesel	1	239	4	0	1	0	84	40	0	0.0	0.0	0	Jet Fuel Truck (1)	0.0
L-08	Helicopter Landing Pad Construction	Air Compressor 340/390hp	390	Diesel	1	203	4	4	1	4	80	40	0.16	72.0	72.0	16000000	Air Compressor 340/390hp (1)	72.0
L-08	Helicopter Landing Pad Construction	Excavator - mini	108	Diesel	1	203	4	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Excavator - mini (1)	75.0
L-08	Helicopter Landing Pad Construction	Fire Deck (5 hp pump)	5	Diesel	1	203	1	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Fire Deck (5 hp pump) (1)	64.0
L-08	Helicopter Landing Pad Construction	Skid Steer Loader	74	Diesel	1	203	4	2	1	2	80	40	0.08	69.0	69.0	8000000	Skid Steer Loader (1)	69.0
L-08	Helicopter Landing Pad Construction	Vibrating Plate	14	Diesel	1	203	4	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Vibrating Plate (1)	75.0
L-08	Helicopter Landing Pad Construction	Water Buffalo Deck (5 hp pump)	5	Diesel	1	203	2	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Water Buffalo Deck (5 hp pump)	64.0
L-09	Helicopter Landing Platform Construction	Air Compressor 340/390hp	390	Diesel	1	203	4	4	1	4	80	40	0.16	72.0	72.0	16000000	Air Compressor 340/390hp (1)	72.0
L-09	Helicopter Landing Platform Construction	Fire Deck (5 hp pump)	5	Diesel	1	203	1	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Fire Deck (5 hp pump) (1)	64.0
L-09	Helicopter Landing Platform Construction	Generator 25 kW	36	Diesel	1	203	2	2	1	2	70	50	0.1	60.0	60.0	1000000	Generator 25 kW (1)	60.0
L-09	Helicopter Landing Platform Construction	Grout Plant	5	Diesel	1	203	8	4	1	4	77	50	0.2	70.0	70.0	10023744.67	Grout Plant (1)	70.0
L-09	Helicopter Landing Platform Construction	Micropile Drill Power Unit	310	Diesel	1	203	8	2	1	2	85	20	0.04	71.0	71.0	12649110.64	Micropile Drill Power Unit (1)	71.0
L-09	Helicopter Landing Platform Construction	Refueler (small fuel transfer station)	5	Diesel	1	203	1	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Refueler (small fuel transfer stat	64.0
L-09	Helicopter Landing Platform Construction	Testing Jack (5 hp pump)	5	Diesel	1	203	2	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Testing Jack (5 hp pump) (1)	64.0
L-09	Helicopter Landing Platform Construction	Water Buffalo Deck (5 hp pump)	5	Diesel	1	203	2	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Water Buffalo Deck (5 hp pump)	64.0
L-10	Helicopter Site Preparation	Chipper	50	Diesel	1	203	3	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Chipper (1)	75.0
L-10	Helicopter Site Preparation	Jackhammer	NA	Diesel	1	203	2	1	1	1	85	20	0.02	68.0	68.0	6324555.32	Jackhammer (1)	68.0
L-10	Helicopter Site Preparation	Jet Fuel Truck	300	Diesel	1	203	4	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Jet Fuel Truck (1)	73.0
L-10	Helicopter Site Preparation	Mower	48	Diesel	2	203	3	2	2	2	85	50	0.1	75.0	78.0	63245553.2	Mower (2)	78.0
L-11	Helicopter Structure Foundation Installation	Air Compressor 340/390hp	390	Diesel	1	216	4	4	1	4	80	40	0.16	72.0	72.0	16000000	Air Compressor 340/390hp (1)	72.0
L-11	Helicopter Structure Foundation Installation	Fire Deck (5 hp pump)	5	Diesel	1	216	1	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Fire Deck (5 hp pump) (1)	64.0
L-11	Helicopter Structure Foundation Installation	Generator 25 kW	36	Diesel	1	216	2	2	1	2	70	50	0.1	60.0	60.0	1000000	Generator 25 kW (1)	60.0

Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Project Quantity	Days Used	Project Wide Hours per Day	Site Specific Hours Per Day	Site Quantity	Site Hours	Noise Level (Leq at 50 feet)	Use Factor	Total Use Factor	Adjusted Noise Level (Leq at 50 feet)	Average Leq (at 50 feet)	Average Power	Equipment Name and Quantity	Output
L-11	Helicopter Structure Foundation Installation	Grout Plant	5	Diesel	1	216	8	4	1	4	77	50	0.2	70.0	70.0	10023744.67	Grout Plant (1)	70.0
L-11	Helicopter Structure Foundation Installation	Micropile Drill Power Unit	310	Diesel	1	216	8	2	1	2	85	20	0.04	71.0	71.0	12649110.64	Micropile Drill Power Unit (1)	71.0
L-11	Helicopter Structure Foundation Installation	Refueler (small fuel transfer station)	5	Diesel	1	216	1	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Refueler (small fuel transfer stat	64.0
L-11	Helicopter Structure Foundation Installation	Testing Jack (5 hp pump)	5	Diesel	1	216	2	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Testing Jack (5 hp pump) (1)	64.0
L-11	Helicopter Structure Foundation Installation	Water Buffalo Deck (5 hp pump)	5	Diesel	1	216	2	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Water Buffalo Deck (5 hp pump)	64.0
L-12	Helicopter Structure Installation	Fire Deck (5 hp pump)	5	Diesel	1	164	1	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Fire Deck (5 hp pump) (1)	64.0
L-12	Helicopter Structure Installation	Generator 25 kW	36	Diesel	1	164	2	2	1	2	70	50	0.1	60.0	60.0	1000000	Generator 25 kW (1)	60.0
L-12	Helicopter Structure Installation	Water Buffalo Deck (5 hp pump)	5	Diesel	1	164	2	1	1	1	77	50	0.05	64.0	64.0	2505936.168	Water Buffalo Deck (5 hp pump)	64.0
L-13	Conductor Installation	Boom truck w/ hydraulic pole puller	150	Diesel	1	76	1	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Boom truck w/ hydraulic pole pu	70.1
L-13	Conductor Installation	Crane - 35 Ton (Manlift)	250	Diesel	3	76	5	2	3	2	85	20	0.04	71.0	75.8	37947331.92	Crane - 35 Ton (Manlift) (3)	75.8
L-13	Conductor Installation	D8 Sag Dozer	200	Diesel	3	76	10	2	3	2	85	40	0.08	74.0	78.8	75894663.84	D8 Sag Dozer (3)	78.8
L-13	Conductor Installation	Hydraulic Pole Puller	150	Diesel	1	76	1	1	1	1	85	50	0.05	72.0	72.0	15811388.3	Hydraulic Pole Puller (1)	72.0
L-13	Conductor Installation	Pickup Truck - 1 ton	410	Diesel	4	76	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-13	Conductor Installation	Pickup Truck - 1/2 ton	395	Gasoline	4	76	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1/2 ton (4)	50.1
L-13	Conductor Installation	Water Truck	300	Diesel	2	76	6	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Water Truck (2)	76.0
L-13	Conductor Installation	Wire Puller	250	Diesel	1	76	5	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Wire Puller (1)	76.8
L-13	Conductor Installation	Wire Trailer/Tensioner	250	Diesel	1	76	5	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Wire Trailer/Tensioner (1)	76.8
L-14	Excavate Trench	Air Compressor 340/390hp	390	Diesel	1	201	8	4	1	4	80	40	0.16	72.0	72.0	16000000	Air Compressor 340/390hp (1)	72.0
L-14	Excavate Trench	Arrow Board	0	Diesel	2	201	8	4	2	4	0	0	0	0.0	3.0	0	Arrow Board (2)	3.0
L-14	Excavate Trench	Backhoe	150	Diesel	2	201	6	2	2	2	80	40	0.08	69.0	72.0	16000000	Backhoe (2)	72.0
L-14	Excavate Trench	Concrete Saw	13	Diesel	1	201	2	1	1	1	90	20	0.02	73.0	73.0	20000000	Concrete Saw (1)	73.0
L-14	Excavate Trench	Dump Truck	415	Diesel	3	201	8	2	3	2	84	40	0.08	73.0	77.8	60285274.36	Dump Truck (3)	77.8
L-14	Excavate Trench	Flatbed truck	350	Diesel	1	201	10	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Flatbed truck (1)	73.0
L-14	Excavate Trench	Foreman Truck	300	Diesel	1	201	8	2	1	2	55	40	0.08	44.0	44.0	25298.22128	Foreman Truck (1)	44.0
L-14	Excavate Trench	Light plant	0	Diesel	4	201	10	8	4	8	0	0	0	0.0	6.0	0	Light plant (4)	6.0
L-14	Excavate Trench	Loader	230	Diesel	1	201	6	3	1	3	80	40	0.12	70.8	70.8	12000000	Loader (1)	70.8
L-14	Excavate Trench	Pickup Truck - 1 ton	410	Diesel	4	201	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-14	Excavate Trench	Trackhoe	250	Diesel	4	201	4	2	4	2	85	40	0.08	74.0	80.1	101192885.1	Trackhoe (4)	80.1
L-14	Excavate Trench	Trencher	75	Diesel	2	201	5	2	2	2	85	40	0.08	74.0	77.0	50596442.56	Trencher (2)	77.0
L-14	Excavate Trench	Water truck	300	Diesel	1	201	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water truck (1)	73.0
L-15	Duct Bank & Conduit Installation	Air Compressor 340/390hp	390	Diesel	1	199	8	4	1	4	80	40	0.16	72.0	72.0	16000000	Air Compressor 340/390hp (1)	72.0
L-15	Duct Bank & Conduit Installation	Arrow Board	0	Diesel	2	199	8	4	2	4	0	0	0	0.0	3.0	0	Arrow Board (2)	3.0
L-15	Duct Bank & Conduit Installation	Backhoe	150	Diesel	2	199	6	2	2	2	80	40	0.08	69.0	72.0	16000000	Backhoe (2)	72.0
L-15	Duct Bank & Conduit Installation	Flatbed truck	350	Diesel	1	199	10	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Flatbed truck (1)	73.0
L-15	Duct Bank & Conduit Installation	Loader	230	Diesel	1	199	6	3	1	3	80	40	0.12	70.8	70.8	12000000	Loader (1)	70.8
L-15	Duct Bank & Conduit Installation	Pickup Truck - 1 ton	410	Diesel	4	199	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-15	Duct Bank & Conduit Installation	Trackhoe	250	Diesel	4	199	4	2	4	2	85	40	0.08	74.0	80.1	101192885.1	Trackhoe (4)	80.1
L-15	Duct Bank & Conduit Installation	Trencher	75	Diesel	2	199	5	2	2	2	85	40	0.08	74.0	77.0	50596442.56	Trencher (2)	77.0
L-15	Duct Bank & Conduit Installation	Water truck	300	Diesel	1	199	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water truck (1)	73.0
L-16	Cable Installation	Arrow Board	0	Diesel	2	227	8	4	2	4	0	0	0	0.0	3.0	0	Arrow Board (2)	3.0
L-16	Cable Installation	Cable Reel	175	Diesel	1	227	5	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Cable Reel (1)	75.0
L-16	Cable Installation	Pulling Rig	175	Diesel	1	227	5	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Pulling Rig (1)	76.8
L-17	Paving	A/C Roller 5-7 Ton	74	Diesel	1	201	8	2	1	2	85	20	0.04	71.0	71.0	12649110.64	A/C Roller 5-7 Ton (1)	71.0
L-17	Paving	Arrow Board	0	Diesel	2	201	8	4	2	4	0	0	0	0.0	3.0	0	Arrow Board (2)	3.0
L-17	Paving	Backhoe	150	Diesel	1	201	6	2	1	2	80	40	0.08	69.0	69.0	8000000	Backhoe (1)	69.0
L-17	Paving	Bitumen (emulsion) sprayer, trailer-mounted	0	Diesel	1	201	1	1	1	1	0	0	0	0.0	0.0	0	Bitumen (emulsion) sprayer, trai	0.0
L-17	Paving	Concrete Truck	425	Diesel	5	201	2	2	5	2	85	40	0.08	74.0	81.0	126491106.4	Concrete Truck (5)	81.0
L-17	Paving	Flatbed truck	350	Diesel	1	201	10	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Flatbed truck (1)	73.0
L-17	Paving	Grinder	15	Diesel	1	201	3	1	1	1	85	50	0.05	72.0	72.0	15811388.3	Grinder (1)	72.0
L-17	Paving	Pickup Truck - 1 ton	410	Diesel	4	201	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-18	Site Preparation	Backhoe	150	Diesel	2	78	6	2	2	2	80	40	0.08	69.0	72.0	16000000	Backhoe (2)	72.0
L-18	Site Preparation	Boom truck	150	Diesel	1	78	1	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Boom truck (1)	70.1
L-18	Site Preparation	Flatbed truck	350	Diesel	3	78	10	2	3	2	84	40	0.08	73.0	77.8	60285274.36	Flatbed truck (3)	77.8
L-18	Site Preparation	Forklift	100	Diesel	1	78	8	2	1	2	80	40	0.08	69.0	69.0	8000000	Forklift (1)	69.0
L-18	Site Preparation	Loader	230	Diesel	1	78	2	3	1	3	80	40	0.12	70.8	70.8	12000000	Loader (1)	70.8
L-18	Site Preparation	Pickup Truck - 1 ton	410	Diesel	4	78	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-18	Site Preparation	Water truck	300	Diesel	1	78	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water truck (1)	73.0
L-19	Below-Grade Construction	Backhoe - 2X4	68	Diesel	2	78	6	2	2	2	80	40	0.08	69.0	72.0	16000000	Backhoe - 2X4 (2)	72.0
L-19	Below-Grade Construction	Concrete Truck	425	Diesel	4	300	5	2	4	2	85	40	0.08	74.0	80.1	101192885.1	Concrete Truck (4)	80.1
L-19	Below-Grade Construction	Dump Truck	415	Diesel	3	300	10	2	3	2	84	40	0.08	73.0	77.8	60285274.36	Dump Truck (3)	77.8
L-19	Below-Grade Construction	Excavator	250	Diesel	2	78	8	2	2	2	85	40	0.08	74.0	77.0	50596442.56	Excavator (2)	77.0
L-19	Below-Grade Construction	Excavator - Mini	108	Diesel	1	300	8	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Excavator - Mini (1)	75.0
L-19	Below-Grade Construction	Generator 25 kW	36	Diesel	1	300	8	8	1	8	70	50	0.4	66.0	66.0	4000000	Generator 25 kW (1)	66.0
L-19	Below-Grade Construction	Loader	230	Diesel	2	300	8	3	2	3	80	40	0.12	70.8	73.8	24000000	Loader (2)	73.8
L-19	Below-Grade Construction	Pickup Truck - 1 ton	410	Diesel	4	300	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-19	Below-Grade Construction	Pickup Truck - 1/2 ton	395	Gasoline	4	300	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1/2 ton (4)	50.1
L-19	Below-Grade Construction	Pressure Digger - Lo-Drill (Tracked)	275	Diesel	1	300	5	2	1	2	85	20	0.04	71.0	71.0	12649110.64	Pressure Digger - Lo-Drill (Tracke	71.0
L-19	Below-Grade Construction	Skid Steer Loader	74	Diesel	2	300	8	2	2	2	80	40	0.08	69.0	72.0	16000000	Skid Steer Loader (2)	72.0
L-19	Below-Grade Construction	Tool - Van/Conex 20'	NA	Diesel	1	300	3	3	1	3	55	40	0.12	45.8	45.8	37947.33192	Tool - Van/Conex 20' (1)	45.8
L-19	Below-Grade Construction	Trencher	75	Diesel	2	300	5	2	2	2	85	40	0.08	74.0	77.0	50596442.56	Trencher (2)	77.0
L-19	Below-Grade Construction	Water Truck	300	Diesel	1	300	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water Truck (1)	73.0
L-19	Below-Grade Construction	Wire Puller	250	Diesel	1	300	3	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Wire Puller (1)	76.8
L-19	Below-Grade Construction	Wire Trailer/Tensioner	250	Diesel	1	300	5	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Wire Trailer/Tensioner (1)	76.8

Activity Index	Activity Name	Equipment Name	HP	Fuel Type	Project Quantity	Days Used	Project Wide Hours per Day	Site Specific Hours Per Day	Site Quantity	Site Hours	Noise Level (Leq at 50 feet)	Use Factor	Total Use Factor	Adjusted Noise Level (Leq at 50 feet)	Average Leq (at 50 feet)	Average Power	Equipment Name and Quantity	Output
L-20	Above-Grade Construction	120' Manlift	74	Diesel	2	903	5	2	2	2	85	20	0.04	71.0	74.0	25298221.28	120' Manlift (2)	74.0
L-20	Above-Grade Construction	Crane - 200 Ton	275	Diesel	1	903	4	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Crane - 200 Ton (1)	70.1
L-20	Above-Grade Construction	Crane - 35 Ton (Manlift)	250	Diesel	2	903	5	2	2	2	85	20	0.04	71.0	74.0	25298221.28	Crane - 35 Ton (Manlift) (2)	74.0
L-20	Above-Grade Construction	Forklift - 10k Reach	130	Diesel	2	903	8	2	2	2	80	40	0.08	69.0	72.0	16000000	Forklift - 10k Reach (2)	72.0
L-20	Above-Grade Construction	Forklift - 15k Reach	130	Diesel	1	903	8	2	1	2	80	40	0.08	69.0	69.0	8000000	Forklift - 15k Reach (1)	69.0
L-20	Above-Grade Construction	Generator 25 kW	36	Diesel	2	903	8	8	2	8	70	50	0.4	66.0	69.0	8000000	Generator 25 kW (2)	69.0
L-20	Above-Grade Construction	Loader	230	Diesel	2	903	8	3	2	3	80	40	0.12	70.8	73.8	24000000	Loader (2)	73.8
L-20	Above-Grade Construction	Pickup Truck - 1 ton	410	Diesel	4	300	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-20	Above-Grade Construction	Pickup Truck - 1/2 ton	395	Gasoline	4	300	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1/2 ton (4)	50.1
L-20	Above-Grade Construction	Welding Truck	250	Diesel	2	903	2	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Welding Truck (2)	76.0
L-20	Above-Grade Construction	Wire Puller	250	Diesel	1	300	3	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Wire Puller (1)	76.8
L-20	Above-Grade Construction	Wire Trailer/Tensioner	250	Diesel	1	300	5	3	1	3	85	50	0.15	76.8	76.8	47434164.9	Wire Trailer/Tensioner (1)	76.8
L-21	Commissioning and Testing	Crane - 35 Ton (Manlift)	250	Diesel	1	903	5	2	1	2	85	20	0.04	71.0	71.0	12649110.64	Crane - 35 Ton (Manlift) (1)	71.0
L-21	Commissioning and Testing	Pickup Truck - 1 ton	410	Diesel	4	903	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1 ton (4)	50.1
L-21	Commissioning and Testing	Pickup Truck - 1/2 ton	395	Gasoline	4	903	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1/2 ton (4)	50.1
L-21	Commissioning and Testing	Tool - Van/Conex 20'	NA	Diesel	3	253	3	3	3	3	55	40	0.12	45.8	50.6	113841.9958	Tool - Van/Conex 20' (3)	50.6
L-21	Commissioning and Testing	Water Truck	300	Diesel	1	903	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water Truck (1)	73.0
L-22	Site & ROW Restoration (overhead)	D6 Type Dozer	250	Diesel	1	127	6	2	1	2	85	40	0.08	74.0	74.0	25298221.28	D6 Type Dozer (1)	74.0
L-22	Site & ROW Restoration (overhead)	Dump Truck	415	Diesel	2	127	10	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Dump Truck (2)	76.0
L-22	Site & ROW Restoration (overhead)	Excavator - Mini	108	Diesel	1	127	6	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Excavator - Mini (1)	75.0
L-22	Site & ROW Restoration (overhead)	Haul Truck	425	Diesel	1	127	10	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Haul Truck (1)	73.0
L-22	Site & ROW Restoration (overhead)	Hydroseed Truck	402	Diesel	1	127	6	4	1	4	84	40	0.16	76.0	76.0	40190182.9	Hydroseed Truck (1)	76.0
L-22	Site & ROW Restoration (overhead)	Motor Grader	250	Diesel	1	127	6	2	1	2	85	40	0.08	74.0	74.0	25298221.28	Motor Grader (1)	74.0
L-22	Site & ROW Restoration (overhead)	Pickup Truck - 1 ton	410	Diesel	1	127	3	2	1	2	55	40	0.08	44.0	44.0	25298.22128	Pickup Truck - 1 ton (1)	44.0
L-22	Site & ROW Restoration (overhead)	Pickup Truck - 1/2 ton	395	Gasoline	4	127	2	2	4	2	55	40	0.08	44.0	50.1	101192.8851	Pickup Truck - 1/2 ton (4)	50.1
L-22	Site & ROW Restoration (overhead)	Skid Steer Loader	74	Diesel	1	127	6	2	1	2	80	40	0.08	69.0	69.0	8000000	Skid Steer Loader (1)	69.0
L-22	Site & ROW Restoration (overhead)	Water Truck	300	Diesel	2	127	6	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Water Truck (2)	76.0
L-22	Site & ROW Restoration (overhead)	Water Truck	300	Diesel	1	127	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water Truck (1)	73.0
L-23	Site & ROW Restoration (underground)	Boom truck w/ hydraulic pole puller	150	Diesel	1	98	6	2	1	2	85	16	0.032	70.1	70.1	10119288.51	Boom truck w/ hydraulic pole pu	70.1
L-23	Site & ROW Restoration (underground)	Excavator - Mini	108	Diesel	1	98	6	2	1	2	85	50	0.1	75.0	75.0	31622776.6	Excavator - Mini (1)	75.0
L-23	Site & ROW Restoration (underground)	Haul Truck	425	Diesel	1	98	10	0.5	1	0.5	84	40	0.02	67.0	67.0	5023772.863	Haul Truck (1)	67.0
L-23	Site & ROW Restoration (underground)	Hydroseed Truck	402	Diesel	1	98	6	4	1	4	84	40	0.16	76.0	76.0	40190182.9	Hydroseed Truck (1)	76.0
L-23	Site & ROW Restoration (underground)	Pickup Truck - 1 ton	410	Diesel	1	98	3	0.5	1	0.5	55	40	0.02	38.0	38.0	6324.55532	Pickup Truck - 1 ton (1)	38.0
L-23	Site & ROW Restoration (underground)	Pickup Truck - 1/2 ton	395	Gasoline	4	98	2	0.5	4	0.5	55	40	0.02	38.0	44.0	25298.22128	Pickup Truck - 1/2 ton (4)	44.0
L-23	Site & ROW Restoration (underground)	Skid Steer Loader	74	Diesel	1	98	6	2	1	2	80	40	0.08	69.0	69.0	8000000	Skid Steer Loader (1)	69.0
L-23	Site & ROW Restoration (underground)	Water Truck	300	Diesel	2	98	6	2	2	2	84	40	0.08	73.0	76.0	40190182.9	Water Truck (2)	76.0
L-23	Site & ROW Restoration (underground)	Water Truck	300	Diesel	1	98	6	2	1	2	84	40	0.08	73.0	73.0	20095091.45	Water Truck (1)	73.0

Table 4: Activity List and Noise Levels

Activity Index	Component	Activity Name	Average Leq (at 50 feet)	Dist to 75 dBA Leq	Dist to 70 dBA Leq	Dist to 65 dBA Leq	Dist to 60 dBA Leq	Dist to 55 dBA Leq	Duration at Each (Days)	Nearest Receptor Distance (feet)	Noise at Nearest Receptor (dBA)
L-01	General	Survey and Staking	47.0	--	--	--	--	--	1,052.0	30	51.5
L-02	General	Utility Locates	73.2	--	72.5	129.0	229.3	407.8	1,052.0	30	77.7
L-03	General	Mobilization	79.0	79.2	140.8	250.4	445.2	791.8	47.0	30	83.4
L-04	230 kV Overhead	Access Road Construction	85.3	163.5	290.7	516.9	919.2	1,634.6	203.0	180	74.2
L-05	230 kV Overhead	Conventional Structure Foundation Installation	85.0	158.6	282.1	501.6	892.0	1,586.3	303.0	180	73.9
L-06	230 kV Overhead	Conventional Structure Installation	79.8	87.0	154.8	275.2	489.4	870.3	252.0	180	68.7
L-07	230 kV Overhead	Helicopter Support	90.0	280.5	498.8	887.0	1,577.4	2,805.0	239.0	300	74.4
L-08	230 kV Overhead	Helicopter Landing Pad Construction	79.7	85.4	151.9	270.1	480.3	854.0	203.0	300	64.1
L-09	230 kV Overhead	Helicopter Landing Platform Construction	77.0	62.7	111.5	198.2	352.5	626.8	203.0	300	61.4
L-10	230 kV Overhead	Helicopter Site Preparation	80.8	97.9	174.1	309.7	550.7	979.2	203.0	300	65.3
L-11	230 kV Overhead	Helicopter Structure Foundation Installation	77.0	62.7	111.5	198.2	352.5	626.8	216.0	300	61.4
L-12	230 kV Overhead	Helicopter Structure Installation	67.8	--	--	68.9	122.6	218.0	164.0	300	52.2
L-13	230 kV Overhead	Conductor Installation	84.4	147.5	262.2	466.3	829.2	1,474.6	76.0	180	73.3
L-14	230 kV Underground	Excavate Trench	85.0	158.2	281.2	500.1	889.4	1,581.5	201.0	30	89.4
L-15	230 kV Underground	Duct Bank & Conduit Installation	83.7	136.6	242.9	432.0	768.2	1,366.2	199.0	30	88.2
L-16	230 kV Underground	Cable Installation	79.0	79.1	140.6	250.0	444.6	790.6	227.0	30	83.4
L-17	230 kV Underground	Paving	82.6	120.3	214.0	380.5	676.7	1,203.3	201.0	30	87.1
L-18	Suncrest Substation Mods	Site Preparation	81.0	100.0	177.9	316.4	562.6	1,000.4	78.0	2,540	46.9
L-19	Suncrest Substation Mods	Below-Grade Construction	86.8	195.2	347.2	617.4	1,097.9	1,952.4	300.0	2,540	52.7
L-20	Suncrest Substation Mods	Above-Grade Construction	84.0	141.1	251.0	446.3	793.7	1,411.4	903.0	2,540	49.9
L-21	General	Commissioning and Testing	75.2	51.1	90.9	161.7	287.5	511.2	253.0	180	64.1
L-22	General	Site & ROW Restoration (overhead)	84.0	140.9	250.6	445.6	792.3	1,409.0	127.0	180	72.9
L-23	General	Site & ROW Restoration (underground)	81.9	110.8	197.0	350.4	623.0	1,107.9	98.0	30	86.3

Table 5: Construction Equipment Vibration Levels

Equipment	PPV at 25 feet	Approximate Nearest Receptor Distance (feet)	At Receptor
Small Bulldozer	0.003	30	0.002282177
Micropile Drill	0.089	180	0.004606714
Jackhammer	0.035	30	0.026625402
Loaded Truck	0.076	30	0.057815159
Large Bulldozer	0.089	30	0.067704594
Vibratory Roller	0.21	30	0.159752413

3.15 POPULATION AND HOUSING

This section describes the existing conditions for population and housing, as well as employment in the area of the San Diego Gas & Electric Company Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential environmental impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.15.1 Environmental Setting

3.15.1.1 Population

Historical and projected future population data are presented in Table 3.15-1: Population Trends in San Diego County. According to the United States (U.S.) Census Bureau, the population in San Diego County grew by 7 percent from 2000 to 2010, and the population grew by 8.4 percent between 2010 and 2020. The California Department of Finance projects that San Diego County's population will grow by 2.9 percent from 2020 to 2030. Between 2030 and 2040, San Diego County's population is forecasted to increase by 2.4 percent. The projected future population data emphasize that the populations in the Proposed Project vicinity will continue increasing into 2040.

Table 3.15-1: Population Trends in San Diego County

Year	Population	Percent Change
2000	2,813,833	--
2010	3,022,468	7.0
2020	3,298,634	8.4
2030	3,398,739	2.9
2040	3,481,551	2.4

Sources: California Department of Finance 2025 and U.S. Census Bureau 2025

3.15.1.2 Housing

Housing data and vacancy rates are presented in Table 3.15-2: Housing Data in San Diego County. According to the U.S. Census Bureau, vacancy rates in San Diego County decreased from 8.1 percent to 7 percent from 2010 to 2020, and there were 86,736 vacant housing units in San Diego County in 2024. The average household size in San Diego County has stayed relatively consistent between 2010 and 2024, ranging from 2.75 in 2010 to 2.69 in 2024.

The California Department of Housing and Community Development (HCD) and local councils of government assign a Regional Housing Needs Allocation (RHNA) every 5 years to each local government in California. The RHNA determines the total number of new homes a local government must construct and how affordable each home must be to meet housing needs in that locality.

Table 3.15-2: Housing Data in San Diego County

Year	Total Units	Vacant Units	Vacancy Rate (percentage)	Average Household Size
2010	1,154,874	93,085	8.1	2.75
2020	1,215,528	84,825	7.0	2.86
2024	1,271,828	86,736	6.8	2.69

Source: U.S. Census Bureau 2025

The local council of government for San Diego County is the San Diego Association of Governments. According to the County of San Diego's (County's) 6th Cycle Housing Element Update, San Diego County must accommodate a total of 6,700 housing units between the Sixth Cycle RHNA planning period of 2021 to 2029. The County's planned and projected units for the 2021-2029 period are as follows:

- 1,834 very low-income units,
- 992 low-income units,
- 1,165 moderate-income units, and
- 2,709 above-moderate-income units (County of San Diego 2021).

3.15.1.2.1 Approved Housing Developments

No approved or pending housing developments were identified within 1 mile of the Proposed Project based on a review of the County's Planning and Development Services website (County of San Diego 2025). One approved Tentative Subdivision Map for a 23-lot residential development within the City of El Cajon (City) is located approximately 0.25 mile southeast of a proposed staging area for the Proposed Project, near the intersection of Greenfield Drive and East Madison Avenue (City of El Cajon 2025).

3.15.1.3 Employment

The State of California Employment Development Department (EDD) compiles current and historical employment data for California counties and metropolitan areas. According to EDD, employment in San Diego County increased approximately 5.14 percent (73,300 jobs) between 2010 and 2020. As of 2024, the following are the top four industries in San Diego County in terms of share of total employment:

- professional services (17.0 percent);
- private education and health services (16.4 percent);
- government (16.3 percent); and
- trade, transportation, and utilities (14.2 percent) (EDD 2025a).

EDD data show the unemployment rate in San Diego County has generally been 1 to 2 percentage points below the state unemployment rate. In December 2024, the statewide unemployment rate was 5.3 percent, and the countywide unemployment rate was 4.3 percent. The countywide unemployment rate has sharply decreased since 2010, when it peaked at 10.9 percent (EDD 2025b).

3.15.2 Regulatory Setting

3.15.2.1 Federal

No federal regulations related to population, housing or employment are relevant to the Proposed Project.

3.15.2.2 State

California Housing Element Law

California's Housing Element Law (California Government Code [CGC] 65580–65589.8) acknowledges that providing decent housing and a healthy living environment for all Californians, including farmworkers, is an urgent priority. The law was created to ensure that cities and counties understand and fulfill their share of the responsibility in meeting the state's housing goals. It requires each local government to adopt a housing element as part of its general plan, outlining how it will support those goals. The law also recognizes that each community is best suited to decide what specific actions it should take and promotes collaboration among local governments to tackle regional housing challenges. According to Section 65583 of the CGC, the housing element must include an assessment of current and future housing needs, along with clearly defined goals, policies, measurable objectives, available financial resources, and planned programs for preserving and expanding housing.

Regional Housing Needs Allocation Plan

Since 1969, California has mandated that every city and county plan for the housing needs of all community members and develop a Regional Housing Needs Allocation Plan. The process begins with HCD estimating how much housing—across different income levels—is needed in each region. Regional planning agencies then decide how to distribute those housing targets among local governments. Each city or county must then create a housing element, which is part of their state-required general plan, outlining how they will meet their share of the housing demand (HCD 2025).

3.15.2.3 Local

3.15.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan was reviewed, and no goals or policies that pertain to the Proposed Project concerning population, housing, or employment were identified (County of San Diego 2011).

Alpine Community Plan

The Draft Alpine Community Plan contains the following policy relevant to population and housing (County of San Diego 2020):

- **Policy H-1.2:** Support diversity of housing types that meet the needs of a diverse population.

3.15.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals or policies that pertain to the Proposed Project concerning population, housing, or employment were identified (City of El Cajon 2000).

3.15.3 Impact Analysis and Mitigation Measures

3.15.3.1 Analysis Methodology

Impacts to population, employment, and housing were determined based on information summarized in Section 3.15.1 Environmental Setting that was obtained from reviews of the following:

- California Department of Finance and U.S. Census Bureau population growth projections;
- the California HCD RHNA;
- EDD data;
- U.S. Census Bureau housing occupancy data; and
- local agency planning documents.

3.15.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to population, housing, or employment.

3.15.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For population and housing, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

3.15.3.4 Impact Analysis

3.15.3.4.1 Impact POP-01: Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes or business) or indirectly (e.g., through extension of roads or other infrastructure)?

Construction, and Operations and Maintenance

No Impact. The Proposed Project does not propose any new housing, businesses, or other land use changes that would induce substantial unplanned population growth or housing demand in or near the Proposed Project vicinity. Construction of the Proposed Project would be performed by

approximately 50 construction workers per day during the peak months of construction. It is anticipated that construction activities would be conducted by current SDG&E employees and/or SDG&E subcontractors who are local to the Proposed Project Area. If the need arises to obtain workers from outside the Proposed Project vicinity to assist with construction, these workers would either commute to the area from their current locations or relocate to the area temporarily. No permanent relocation of workers is anticipated for the Proposed Project. In addition, O&M of the Proposed Project components would be performed by current SDG&E employees who are local to the Proposed Project Area. As a result, the Proposed Project would not directly or indirectly induce substantial unplanned population growth or housing demand beyond what is forecasted in the County and City general plans; and no impact would occur.

3.15.3.4.2 Impact POP-02: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Construction, Operations and Maintenance

Less-than-Significant Impact. As described in Section 3.12 Land Use and Planning, the proposed 230 kV overhead (OH) segment, proposed 230 kV underground segment, and the associated work areas would be located on land zoned for open space, agriculture, and rural residential development. The current alignment of the proposed 230 kV OH segment would span one individual home, and relocation of the resident of that home may be required. However, the Proposed Project would not cause a substantial displacement of existing people overall, so impacts would be less than significant. Therefore, the Proposed Project would not cause a substantial displacement of existing people or housing, and impacts would be less than significant.

3.15.4 References

California Department of Finance. 2025. Population Growth Projections by County. Online. https://dof.ca.gov/forecasting/demographics/projections/. Site visited April 2025.

California Department of Housing and Community Development. 2025. Regional Housing Needs Allocation. Online. https://www.hcd.ca.gov/planning-and-community-development/regional-housing-needs-allocation. Site visited May 2025.

California Government Code. 2018. Sections 65580-65589.1. Online. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=65580.&nodeTreePath=12.1.10.10&lawCode=GOV. Site visited May 2025.

City of El Cajon. 2000. City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited August 2025.

City of El Cajon Community Development Department. 2022. City of El Cajon 2021-2029 Housing Element. Online. https://www.elcajon.gov/home/showpublisheddocument/25373/638036046563330000. Site visited August 2025.

City of El Cajon. 2025. Development Projects – Story Map. Online. https://cityofelcajon.maps.arcgis.com/apps/MapTour/index.html?appid=38313716efc54ca2a6b1f00b356a3f3d. Site visited August 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 26, 2025.

County of San Diego. 2021. 6th Cycle Housing Element Update. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/06-Housing-Element-2021.pdf. Site visited May 2025.

County of San Diego. 2025. Planning and Development Department Current Projects. Online. https://www.sandiegocounty.gov/content/sdc/pds/Current_Projects.html. Site visited May 2025.

Employment Development Department (EDD). 2025a. Employment by Industry Data. Online. https://labormarketinfo.edd.ca.gov/data/employment-by-industry.html. Site visited May 2025.

EDD. 2025b. Unemployment Rate and Labor Force. Online. https://labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html. Site visited May 2025.

United States Census Bureau. 2025. Occupancy Status for San Diego County. Online. https://data.census.gov/table/ACSDT5Y2020.B25002?q=Vacancy+Rates&g=050XX00US06073. Site visited November 2025.

3.16 PUBLIC SERVICES

This section describes the existing conditions for public services in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential environmental impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.16.1 Environmental Setting

3.16.1.1 Fire Protection

3.16.1.1.1 United States Forest Service

The United States (U.S.) Forest Service (USFS) responds to all wildfires within National Forests and National Grasslands and employs approximately 10,000 people annually within the USFS wildland fire program (U.S. Department of Agriculture [USDA] 2025a). The USFS wildland fire program staffs wildland firefighters, dispatchers, prevention technicians, and fuel management personnel. The USFS has more than 900 fire engines and hundreds of aircraft available for wildfire response (USDA 2025b).

3.16.1.1.2 California Department of Forestry and Fire Protection and Local Fire Districts

As discussed in Section 3.20 Wildfire, the Proposed Project would primarily cross a State Responsibility Area, making the California Department of Forestry and Fire Protection (CAL FIRE) the primary emergency response agency responsible for fire suppression and prevention. The Proposed Project would cross the San Diego County CAL FIRE Administrative Unit.

The Proposed Project would cross the following local fire districts: San Miguel Fire & Rescue, San Diego County Fire Protection District (FPD), Alpine FPD, and Heartland Fire & Rescue (California Natural Resources Agency 2025, California Governor's Office of Emergency Services 2025, San Miguel Fire & Rescue 2024, Heartland Fire & Rescue 2025a). These districts provide fire suppression, emergency medical services, and hazardous materials response. The fire stations located in the vicinity of the Proposed Project are listed in Table 3.16-1: Fire Stations within 3 Miles of the Proposed Project and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project.

San Miguel Fire & Rescue staffs 80 full-time employees and responds to approximately 15,000 fire and medical emergencies annually (San Miguel Fire & Rescue 2025). San Miguel Fire & Rescue's Station 18 is located approximately 0.6 mile from the Proposed Project and has an average response time of 12 minutes and 36 seconds (San Miguel Fire & Rescue 2024).

The San Diego County FPD provides services to over 40 communities through 35 fire stations and over 500 first responders (San Diego County FPD 2025a). The San Diego County FPD had an average response time of 10 minutes and 16 seconds in 2018 (San Diego County FPD 2020).

The Alpine FPD serves an estimated population of 17,747 people and responded to 1,800 service requests in 2021. The Alpine FPD participates in auto-aid agreements with surrounding agencies, including CAL FIRE, to implement a closest unit dispatch concept; the closest engine of the

Alpine FPD's auto-aid partners will respond to a 911 call (Alpine FPD 2025a). The average emergency response time of Alpine FPD was not publicly available.

Heartland Fire & Rescue serves approximately 195,000 residents across three cities, including the City of El Cajon, through eight fire stations and 118 sworn positions. Heartland Fire & Rescue had an average response time of approximately 9 minutes and 13 seconds in El Cajon during the 2023 to 2024 fiscal year (Heartland Fire & Rescue 2024).

Table 3.16-1: Fire Stations within 3 Miles of the Proposed Project

Fire Station Name	Address	Approximate Distance to the Proposed Project (miles)
Proposed 230 kV Transmission Line and Existing Suncrest Substation		
Station 24 Harbison Canyon San Diego FPD	551 Harbison Canyon Road, El Cajon, CA 92019	0.5
Station 18 San Miguel Fire & Rescue	1811 Suncrest Blvd, El Cajon, CA 92021	0.6
Station 17 Alpine FPD	1364 Tavern Road, Alpine, CA 91901	2.1
Station 21 CAL FIRE Flinn Springs	9711 Flinn Spring Road, El Cajon, CA 92021	2.8
Proposed Hospital Staging Yard		
Station 8 Heartland Fire & Rescue	1470 E Madison Avenue, El Cajon, CA 92019	0.7
Station 6 Heartland Fire & Rescue	100 East Lexington Avenue, El Cajon, CA 92020	2.6
Proposed Greenfield Staging Yard		
Station 23 San Miguel Fire & Rescue	2140 Dehesa Road, El Cajon, CA 92019	1.0
Station 8 Heartland Fire & Rescue	1470 E Madison Avenue, El Cajon, CA 92019	1.3
Station 18 San Miguel Fire & Rescue	1811 Suncrest Blvd, El Cajon, CA 92021	2.4
Proposed Sweetwater Staging/Fly Yard		
Station 17 Alpine FPD	1364 Tavern Road, Alpine, CA 91901	2.7

Sources: Alpine FPD 2025b, Heartland Fire & Rescue 2025b, San Diego County FPD 2025b, San Miguel Fire & Rescue 2024
Note: The proposed High Glen Staging Yard, High Glen Fly Yard, Swat Staging Yard, and Lyons Valley Staging/Fly Yard would not be located within 3.0 miles of a fire station.

3.16.1.2 Law Enforcement

3.16.1.2.1 National Forest System Lands Law Enforcement

The USFS employs approximately 650 law enforcement personnel nationwide, including criminal investigators and law enforcement officers. Criminal investigators conduct investigations into archaeological, timber, fire, and wildlife violations. Law enforcement officers enforce federal law and regulations governing National Forests and are regularly present across National Forests (USDA 2025c). The Proposed Project would be located approximately 2.7 miles south of the USFS Descanso Ranger District office, which is located at 3348 Alpine Boulevard in Alpine.

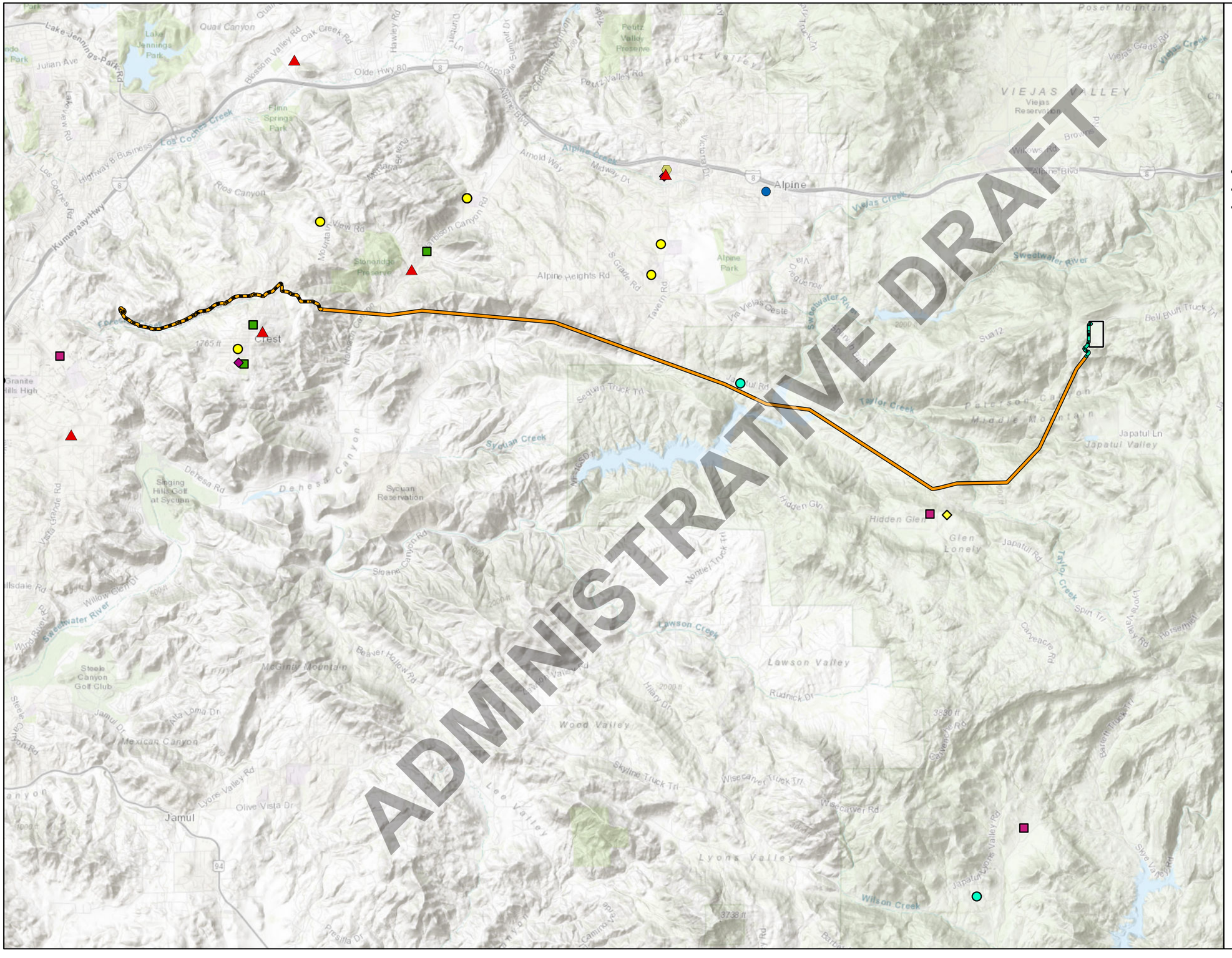

Figure 3.16-1:
Public Service Facilities in the Vicinity of the Proposed Project
Map 1 of 2

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV Overhead Segment
- Proposed 230 kV Eastern Underground Segment
- Proposed 230 kV Western Underground Segment
- Existing Suncrest Substation

Public Service Facilities

- Community Center
- Fire Station
- Library
- Park
- School
- Sheriff Station/Substation/Office

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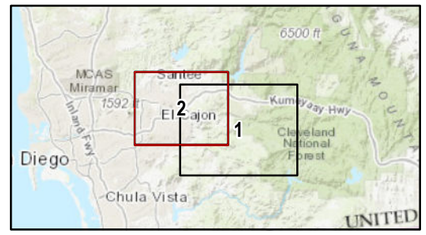
Figure 3.16-1:
Public Service Facilities in the Vicinity of the Proposed Project
Map 2 of 2

Suncrest
230 Kilovolt Loop-In Project

- Staging Yard
- Proposed 230 kV Overhead Segment
- Proposed 230 kV Western Underground Segment

Public Service Facilities

- Community Center
- Fire Station
- Hospitals
- Library
- Park
- School
- Sheriff Station/Substation/Office



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3.16.1.2.2 California Highway Patrol

The Proposed Project would cross the Border Division of the California Highway Patrol (CHP). CHP's officers can enforce laws across the state, with a primary focus on highways, freeways, roads, and streets. The CHP Border Division provides law enforcement services and educational programs to motorists across approximately 9,300 square miles. The CHP Border Division staffs 1,000 uniformed employees, 310 non-uniformed employees, 61 public safety dispatchers, nine public safety operators, and additional senior volunteers and explorers (CHP 2025a). The Proposed Project would be located approximately 1.5 miles east of the CHP's El Cajon Area Office, which is located at 1722 East Main Street in El Cajon. CHP's El Cajon Area office deploys 96 uniformed officers at any given time (CHP 2025b).

3.16.1.2.3 El Cajon Police Department

The El Cajon Police Department provides patrol, investigative, Special Weapons and Tactics, special enforcement, and traffic response in the City of El Cajon. Approximately 60 uniformed officers comprise the El Cajon Police Department's patrol division (City of El Cajon 2025). Average response times from the El Cajon Police Department were not publicly available. The proposed Hospital Staging Yard would be located approximately 2.0 miles northeast of the El Cajon Police Department, and the proposed Greenfield Staging Yard would be located approximately 3.2 miles from the El Cajon Police Department, which is located at 100 Civic Center Way in El Cajon and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project.

3.16.1.2.4 San Diego County Sheriff's Office

The San Diego County Sheriff's Office provides law enforcement, detention, court security services, investigative support, and tactical emergency response across San Diego County, spanning approximately 4,200 square miles. In unincorporated areas of San Diego County, the San Diego County Sheriff's Office provides patrol and investigative service. The San Diego County Sheriff's Office command staff has one sheriff, one undersheriff, three assistant sheriffs, eight commanders, and additional directors and executive staff (San Diego County Sheriff's Office 2025). Average response times for the San Diego County Sheriff's Office were not publicly available. San Diego County Sheriff's Office stations, substations, and offices in the vicinity of the Proposed Project are summarized in Table 3.16-2: Sheriff Stations, Substations, and Offices within 4 Miles of the Proposed Project and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project.

3.16.1.3 Emergency Medical Services

Emergency medical facilities in the vicinity of the Proposed Project include hospitals, and the closest hospital to the Proposed Project is the Sharp Grossmont Hospital, located at 5555 Grossmont Center Drive in La Mesa and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project. The proposed Hospital Staging Yard and Greenfield Staging Yard would be located approximately 5.3 miles and 6.1 miles from Sharp Grossmont Hospital, respectively. The proposed 230 kV western UG segment would be located approximately 7.0 miles from Sharp Grossmont Hospital.

Table 3.16-2: Sheriff Stations, Substations, and Offices within 4 Miles of the Proposed Project

Sheriff's Station, Substation, or Office Name	Address	Approximate Distance to the Proposed Project (miles)
Proposed 230 kV Transmission Line and Existing Suncrest Substation		
Alpine Station	2751 Alpine Boulevard, Alpine, CA 91901	2.5
Lakeside Substation	12365 Parkside Street, Lakeside, CA 92040	3.6
El Cajon Civil Office	250 E. Main Street, El Cajon, CA 92020	4.0
Proposed Hospital Staging Yard		
Lakeside Substation	12365 Parkside Street, Lakeside, CA 92040	3.1
El Cajon Civil Office	250 E. Main Street, El Cajon, CA 92020	2.4
Proposed Greenfield Staging Yard		
Lakeside Substation	12365 Parkside Street, Lakeside, CA 92040	3.8
El Cajon Civil Office	250 E. Main Street, El Cajon, CA 92020	3.0
Proposed Sweetwater Staging/Fly Yard		
Alpine Station	2751 Alpine Boulevard, Alpine, CA 91901	2.4

Source: San Diego County Sheriff's Office 2025
Note: The proposed High Glen Staging Yard, High Glen Fly Yard, Swat Staging Yard, and Lyons Valley Staging/Fly Yard would not be located within 4.0 miles of sheriff stations, substations, or offices.

3.16.1.4 Schools

The Proposed Project would cross the Grossmont Union High, Cajon Valley Union, Dehesa, Alpine Union, and Jamul-Dulzura Union Elementary school districts. The Grossmont Union High School District includes nine high schools, four charter schools, and three adult education centers. The Cajon Valley Union School District includes four elementary schools, two schools offering transitional kindergarten or kindergarten through middle school, one middle school, and one middle through high school. The Dehesa School District offers transitional kindergarten through high school at one campus. The Alpine Union School District includes two elementary schools, one middle school, one preschool through kindergarten, and one kindergarten through middle school. The Jamul-Dulzura Union Elementary school district includes one elementary school, one middle school, and one charter school. Schools in the vicinity of the Proposed Project are summarized in Table 3.16-3: Schools within 2 Miles of the Proposed Project and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project.

3.16.1.5 Recreational Facilities and Parks

Parks within 1 mile of the Proposed Project include Nancy Jane County Park, South Lane Park, Stonebridge Park, and Old Ironsides County Park, which are listed in Table 3.16-4: Parks within 1 Mile of the Proposed Project and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project. Recreation areas like Loveland Reservoir, Cleveland National Forest, and Crestridge Ecological Reserve are further described in Section 3.17 Recreation.

Table 3.16-3: Schools within 2 Miles of the Proposed Project

School Name	Address	Approximate Distance to the Proposed Project (miles)
Proposed 230 kV Transmission Line and Existing Suncrest Substation		
Crest School	2000 Suncrest Boulevard, El Cajon, CA 92021	0.7
Boulder Oaks Elementary School	2320 Tavern Road, Alpine, CA 91901	1.0
Shadow Hills Elementary School	8770 Harbison Canyon Road, Alpine, CA 91901	1.4
Mountain View Learning Academy	8770 Harbison Canyon Road, Alpine, CA 91901	1.4
Creekside Early Learning Center	8818 Harbison Canyon Road, Alpine, CA 91901	1.4
Joan MacQueen Middle School	2001 Tavern Road, Alpine, CA 91901	1.5
Granite Hills High School	1719 East Madison Avenue, El Cajon, CA 92019	1.6
Rios Elementary	14314 Rios Canyon Rd, El Cajon, CA 92021	1.8
Madison Elementary	1615 East Madison Avenue, El Cajon, CA 92019	1.9
Montgomery Middle	1570 Melody Lane, El Cajon, CA 92019	2.0
Proposed Hospital Staging Yard		
Greenfield Middle	1495 Greenfield Drive, El Cajon, CA 92021	0.5
Bostonia Language Academy	1390 East Broadway, El Cajon, CA, 92021	0.6
Madison Elementary	1615 East Madison Avenue, El Cajon, CA, 92019	0.7
Granite Hills High School	1719 East Madison Avenue, El Cajon, CA, 92019	0.8
Sevick Special Education	1609 East Madison Avenue, El Cajon, CA, 92019	0.8
Kidinnu Academy	1025 North Second Street, El Cajon, CA 92021	0.8
Montgomery Middle	1570 Melody Lane, El Cajon, CA, 92019	0.9
W. D. Hall Elementary	1376 Pepper Drive, El Cajon, CA 92021	0.9
Diego Valley East Public Charter	511 North Second Street, El Cajon, CA 92021	1.1
Winter Gardens Elementary	8501 Pueblo Road, Lakeside, CA 92040	1.4
REACH Academy	230 Jamacha Road, El Cajon, CA, 92019	1.4
Meridian Elementary	651 South Third Street, El Cajon, CA, 92019	1.4
Naranca Elementary	1030 Naranca Avenue, El Cajon, CA 92021	1.5
El Cajon Valley High	1035 East Madison Avenue, El Cajon, CA 92021	1.8
Lexington Elementary	1145 Redwood Avenue, El Cajon, CA, 92019	1.9
Magnolia Elementary	650 Greenfield Drive, El Cajon, CA 92021	2.0

School Name	Address	Approximate Distance to the Proposed Project (miles)
Proposed Greenfield Staging Yard		
Granite Hills High School	1719 East Madison Avenue, El Cajon, CA, 92019	0.6
Madison Avenue Elementary	1615 East Madison Avenue, El Cajon, CA, 92019	0.9
Sevick Special Education	1609 East Madison Avenue, El Cajon, CA, 92019	0.9
Montgomery Middle	1570 Melody Lane, El Cajon, CA, 92019	1.0
Greenfield Middle	1495 Greenfield Drive, El Cajon, CA 92021	1.3
Cajon Valley Home	1384 Broadway, El Cajon, CA 92021	1.4
Bostonia Language Academy	1390 East Broadway, El Cajon, CA 92021	1.4
Meridian Elementary	651 South Third Street, El Cajon, CA, 92019	1.5
Kidinnu Academy	1025 North Second Street, El Cajon, CA 92021	1.7
Diego Valley East Public Charter	511 North Second Street, El Cajon, CA 92021	1.7
W. D. Hall Elementary	1376 Pepper Drive, El Cajon, CA 92021	1.8
REACH Academy	230 Jamacha Road, El Cajon, CA, 92019	1.8
Proposed Sweetwater Staging/Fly Yard		
Boulder Oaks Elementary School	2320 Tavern Road, Alpine, CA 91901	1.6
Joan MacQueen Middle School	2001 Tavern Road, Alpine, CA 91901	1.8

Source: California Department of Education 2025
Note: The proposed High Glen Staging Yard, High Glen Fly Yard, Swat Staging Yard, and Lyons Valley Staging/Fly Yard would not be located within 2.0 miles of schools.

Table 3.16-4: Parks within 1 Mile of the Proposed Project

Park Name	Address	Amenities	Approximate Distance to the Proposed Project (miles)
Proposed 230 kV Transmission Line and Existing Suncrest Substation			
Nancy Jane County Park	120 N Park Drive, El Cajon, CA 92021	Tennis courts, basketball court, playground, and horseshoe pits	0.4
Old Ironsides County Park	326 Harbison Canyon Road, El Cajon, CA 92019	Playgrounds, basketball courts, and community center	0.7
South Lane Park	218 South Lane, El Cajon, CA 92021	Trails (undeveloped park)	1.0
Proposed Hospital Staging Yard			
Albert Van Zanten Park	1495 Greenfield Drive, El Cajon, CA 92021	Baseball fields, playing fields, and basketball courts	0.5
Bostonia Recreation Center	1049 Bostonia Street, El Cajon, CA 92021	Picnic tables, playground, and playing field	0.6
Kennedy Recreation Center & Skate Park	1675 E Madison Avenue, El Cajon, CA 92019	Picnic tables, playground, gymnasium, skatepark, and baseball field	0.7
Proposed Greenfield Staging Yard			
Kennedy Recreation Center & Skate Park	1675 E Madison Avenue, El Cajon, CA 92019	Picnic tables, playground, gymnasium, skatepark, and baseball field	0.7

Sources: California Protected Areas Database 2025; County of San Diego Parks and Recreation 2025a, 2025b, 2025c; City of El Cajon 2025b, 2025c, 2025d; Google 2025

Note: The proposed Sweetwater Staging/Fly Yard, High Glen Staging Yard, High Glen Fly Yard, and Swat Staging Yard would not be located within 1.0 mile of parks.

3.16.1.6 Community Centers

Community centers within 3 miles of the Proposed Project are listed in Table 3.16-5: Community Centers within 3 Miles of the Proposed Project and depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project.

3.16.1.7 Libraries

San Diego County Library provide library services in the vicinity of the Proposed Project. The proposed 230 kV Transmission Line would be located approximately 0.7 mile north of the Crest Library branch of the San Diego County Library, which is located at 105 Juanita Lane in El Cajon. The proposed Hospital Staging Yard and Greenfield Staging Yard would be located approximately 2.5 miles and 3.2 miles northeast of the El Cajon branch of the San Diego County Library, respectively. The El Cajon branch of the San Diego County Library is located at 201 E Douglas Ave in El Cajon. The proposed Sweetwater Staging/Fly Yard would be located approximately 2.8 miles south of the Alpine branch of the San Diego County Library, located at 1752 Alpine Boulevard in Alpine. The libraries are depicted in Figure 3.16-1: Public Service Facilities in the Vicinity of the Proposed Project.

3.16.2 Regulatory Setting

3.16.2.1 Federal

3.16.2.1.1 Southern California National Forests Land Management Plan

Each National Forest, National Grassland, and prairie managed by the USFS has an individual land management plan to guide specific uses, such as timber harvest, primitive recreation, or rare plant protection. Part 1: Southern California National Forests Vision and Part 2: Cleveland National Forest Strategy of the Southern California National Forests Land Management Plan describe fire and law enforcement services within the National Forests but do not contain policies relevant to the Proposed Project.

3.16.2.2 State

3.16.2.2.1 California Fire Code

Title 24 California Code of Regulations Part 9 is known as the California Fire Code. This code includes provisions for planning, precautions, and preparations for fire safety and fire protection during various activities. This includes, but is not limited to construction, demolition, building requirements, and guidelines for working with flammable chemicals and materials (International Code Council 2024).

Table 3.16-5: Community Centers within 3 Miles of the Proposed Project

Center Name	Address	Amenities	Approximate Distance to the Proposed Project (miles)
Proposed 230 kV Transmission Line and Existing Suncrest Substation			
The Alpine Club	1830 Alpine Boulevard, Alpine, CA 91901	Rooms to accommodate work functions, town halls, banquets, celebrations, galas, music recitals, and other events	2.2
Proposed Hospital Staging Yard			
Bostonia Recreation Center	1049 Bostonia Street, El Cajon, CA 92021	Meeting room to rent for club meetings, children's parties, bridal/baby showers, and special events	0.6
Salvation Army East County Red Shield Community Center	1025 E Main Street, El Cajon, CA 92021	Fitness classes, gymnasium, youth music programs Room and gymnasium available to rent for events	1.8
Ronald Reagan Community Center	195 E Douglas Avenue, El Cajon, CA 92020	Designed for wedding receptions, banquets, business meetings, and a variety of special events	2.6
Proposed Greenfield Staging Yard			
Bostonia Recreation Center	1049 Bostonia Street, El Cajon, CA 92021	Meeting room to rent for club meetings, children's parties, bridal/baby showers, and special events	1.5
Salvation Army East County Red Shield Community Center	1025 E Main Street, El Cajon, CA 92021	Fitness classes, gymnasium, youth music programs Room and gymnasium available to rent for events	2.4
Proposed Sweetwater Staging Yard/Fly Yard			
The Alpine Club	1830 Alpine Boulevard, Alpine, CA 91901	Rooms to accommodate work functions, town halls, banquets, celebrations, galas, music recitals, and other events	2.8

Sources: Alpine Community Center 2025; City of El Cajon 2025c, 2025e; Salvation Army 2025
Note: The proposed High Glen Staging Yard, High Glen Fly Yard, Swat Staging Yard, and Lyons Valley Staging/Fly Yard would not be located within 3.0 miles of community centers.

3.16.2.2.2 California Public Resources Code Sections 4292 and 4293

California Public Resources Code (PRC) Section 4292 states the following:

> "[A]ny person that owns, controls, operates, or maintains any electrical transmission or distribution line … shall, during such times and in such areas as are determined to be necessary by the director or the agency, has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightening arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such a pole or tower."

PRC Section 4293 states the following:

> "[A]ny person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such area, maintain a clearance of the respective distances which are specified in this section in all directions between all vegetation and all conductors which are carrying electric current:
>
> (a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts, 4 feet
> (b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts, 6 feet
> (c) For any line which is operating at 110,000 or more volts, 10 feet
>
> In every case, such distance shall be sufficiently great to furnish the required clearance at any position of the wire, or conductor when the adjacent air temperature is 120 degrees Fahrenheit, or less. Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard."

3.16.2.3 Local

3.16.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan's Safety Element contains the following policy relevant to public services:

- **Policy S-3.4: Coordination with Public Utilities**. Public Safety Power Shutoff (PSPS) coordination between the County and SDGE should occur in order to limit the impacts on residents and businesses. SDGE and the County should continue to collaborate while monitoring weather conditions to ensure pertinent information is shared.

Alpine Community Plan

The Draft Alpine Community Plan contains the following policy relevant to public services:

- **Policy S-1.4:** Support the establishment of alternative means of ingress/egress to/from Palo Verde Ranch and/or other existing neighborhoods.

3.16.2.3.2 City of El Cajon

El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals or policies that pertain to the Proposed Project concerning public services were identified (City of El Cajon 2000).

3.16.3 Impact Analysis and Mitigation Measures

3.16.3.1 Analysis Methodology

Evaluation of potential public service impacts was based on a review of federal, state, and local emergency service provider documents and a desktop review of the Proposed Project Area. Impacts on public services that could result from implementation of the Proposed Project were identified by comparing the baseline provision of public services to future demand and potential disruptions in service from implementation of the Proposed Project.

3.16.3.2 Applicant-Proposed Measures

No applicant-proposed measures (APMs) were proposed related to public services.

3.16.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For public services, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

  - fire protection;
  - police protection;
  - schools;
  - parks; or
  - other public facilities?

3.16.3.4 Impact Analysis

3.16.3.4.1 Impact PUB-01: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause

significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives?

Fire Protection

Construction, Operations, and Maintenance

Less-than-Significant Impact. Construction of the Proposed Project would have a less-than-significant impact on service ratios, response times, or other public service objectives of fire protection in the area. Construction of the proposed 230 kV western UG segment would likely require the closure of one lane of traffic during daytime hours for an extended period. However, land closures would likely only occur for 40 to 500 feet at a time or as specified in encroachment permits and would be returned to two-way traffic at the end of each workday. The homes along La Cresta Road where the proposed 230 kV western UG segment would be installed are only accessible by vehicle from La Cresta Road. Further, some homes along Mountain View Road and Canyon Rim Drive can only be accessed by vehicle from Mountain View Road and Canyon Rim Drive where the proposed 230 kV western UG segment would be installed. As a result, without proper coordination with emergency service providers, the lane closure along La Cresta Road, Mountain View Road, and Canyon Rim Drive could result in a potentially significant impact to emergency vehicle access to homes. Similarly, lane closures along the proposed 230 kV OH segment could be required during wire stringing preparation, such as installation of guard structures and for equipment staging at sites near roadways that have no reasonable parking. However, road closures along the proposed 230 kV OH segment would be expected to be brief and last less than a day at any given location.

Lane closures during the O&M phase for maintenance activities could occur; however, any activity requiring lane closures during the operational phase is unlikely and is would not be expected to occur more than once per year. Any temporary lane closures would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. These plans would verify that emergency service providers are aware of any temporary lane closures and would establish protocols for cases where emergency access is required along roadways with lane closures.

As described in Section 3.21 Wildfire, the Proposed Project would have a less-than-significant impact on increased wildfire risk with the preparation and implementation of a Construction Fire Prevention Plan in accordance with APM FIRE-01. Vehicles would not be staged or parked on vegetation, and SDG&E would clear and trim vegetation in work areas prior to construction in order to minimize fire risk. In the event of a fire in the Proposed Project Area, there would be a temporary increase in demand for fire services. However, the Proposed Project would not require an expansion of fire services or new or physically altered fire departments to maintain acceptable response times and service ratios of emergency services, because the Proposed Project would have a less-than-significant impact on increased wildfire risk with the implementation of APM FIRE-01. O&M of the Proposed Project would be conducted under SDG&E's existing O&M program that serves the Proposed Project Area. As a result, impacts to fire protection would be less than significant.

Police Protection

Construction, Operations, and Maintenance

No Impact. Construction of the Proposed Project would not affect service ratios, response times, or other public service objectives of police protection in the area. Although the need for police services may arise during construction (e.g., for theft or vandalism of construction equipment), the need would not exceed the capacity of the existing providers in the vicinity of the Proposed Project and would not require services beyond existing capacities. As previously described, any temporary lane closures would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. These plans would verify that emergency service providers are aware of any temporary lane closures and would establish protocols for cases where emergency access is required along roadways with lane closures. Therefore, the Proposed Project would not require new or physically altered police departments to maintain acceptable response times and service ratios of emergency services. O&M of the Proposed Project would be conducted under SDG&E's existing O&M program serving the Proposed Project Area, and maintenance activities would continue as they currently do in the area. As a result, no impact would occur.

Schools, Parks, or Other Public Facilities

Construction, Operations, and Maintenance

Less-than-Significant Impact. It is not anticipated that construction of the Proposed Project would adversely affect the provision of services by schools, parks, or other public facilities in the Proposed Project vicinity. The proposed 230 kV Transmission Line would be located approximately 0.7 mile from the closest school, Crest School. Construction of the proposed western 230 kV underground (UG) segment would occur along La Cresta Road, a potential route to access Crest School. Any temporary road closures would be coordinated with local jurisdictions through the encroachment permit process and any required traffic control plans. These permits may require the application of appropriate traffic control measures during this work to verify disruptions to school access are minimized.

As described in Section 3.17 Recreation, several parks and recreation areas would be within 1 mile of the Proposed Project. Intermittent and temporary closures of short sections of two trails may be implemented for public safety, and the proposed Sweetwater Staging/Fly Yard would occupy a portion of the parking lot for Loveland Reservoir which could limit access to the reservoir and nearby trails during the 18-month construction period of the proposed 230 kV transmission line. Other sections of the trails would remain accessible to recreationists during the temporary closures of the trail sections. However, no temporary park closures or temporary closures of roads that would impact access to parks are anticipated.

Construction activities would be unlikely to impact other public facilities such as hospitals and community centers due to their distance from the Proposed Project and the scope of construction. Construction would not impact the closest hospital and community center as the proposed 230 kV transmission line would be located approximately 7 miles from the closest hospital and approximately 2 miles from the closest community center. The proposed 230 kV Transmission Line would be located approximately 0.7 mile from the Crest Library branch of the San Diego County Library. Construction of the proposed 230 kV western UG segment would occur along

La Cresta Road, a potential route to access the Crest Library. Any temporary road closures would be coordinated with local jurisdictions through the encroachment permit process and any required traffic control plans. These permits may require the application of appropriate traffic control measures during this work to verify disruptions to library access are minimized.

Construction of the Proposed Project would not induce population growth in the area and, thus, would not generate the need for new or additional public facilities. O&M of the Proposed Project would be conducted under SDG&E's existing O&M program serving the Proposed Project Area, and maintenance activities would continue as they currently do in the area. Therefore, impacts to schools, parks, or other public facilities would be less than significant.

3.16.4 References

Alpine Community Center. 2025. Available for Rental. Online. http://alpinecommunitycenter.com/facilities.html. Site visited April 19, 2025.

Alpine FPD. 2025a. History of the District. Online. https://www.alpinefire.org/history-of-the-district. Site visited April 10, 2025.

Alpine FPD. 2025b. Operations. Online. https://www.alpinefire.org/operations. Site visited April 10, 2025.

Alpine Union School District. 2025. Alpine Union School District. Online. https://www.alpineschools.net/. Site visited April 11, 2025.

Cajon Valley Union School District. 2025. Cajon Valley Union School District. Online. https://www.cajonvalley.net/. Site visited April 11, 2025.

California Department of Education. 2025. Geo Hub. Online. https://data-cdegis.opendata.arcgis.com/. Site visited April 11, 2025.

California Governor's Office of Emergency Services. 2025. California Local Fire Districts. Online. https://gis-calema.opendata.arcgis.com/datasets/CalEMA::california-local-fire-districts/about. Site visited April 10, 2025.

California Legislative Information. 2025. Public Resource Code Chapter 3. Mountainous, Forest-, Brush- and Grass-Covered Lands [4291 - 4299]. Online. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4292. Site visited April 11, 2025.

California Natural Resources Agency. 2025. CAL FIRE Administrative Units. Online. https://gis.data.cnra.ca.gov/datasets/CALFIRE-Forestry::cal-fire-administrative-units/about. Site visited April 10, 2025.

California Protected Areas Database. 2025. Get CPAD/CCED Data. Online. https://calands.org/get-data/. Site visited April 15, 2025.

CHP. 2025a. Border Division. Online. https://www.chp.ca.gov/Find-an-Office/Border-Division. Site visited April 11, 2025.

CHP. 2025b. (680) El Cajon. Online. https://www.chp.ca.gov/Find-an-Office/Border-Division/Offices/(680)-El-Cajon. Site visited April 11, 2025.

City of El Cajon. 2001. City of El Cajon General Plan 2000. Online. https://www.elcajon.gov/home/showpublisheddocument/140/635497086233100000. Site visited August 13, 2025.

City of El Cajon. 2025a. Your Police Department. Online. https://www.elcajon.gov/your-government/departments/police. Site visited August 13, 2025.

City of El Cajon. 2025b. Albert Van Zanten Park. Online. https://www.elcajon.gov/discover-el-cajon/city-attractions/parks-playgrounds-sports-fields. Site visited August 13, 2025.

City of El Cajon. 2025c. Bostonia Recreation Center. Online. https://www.elcajon.gov/your-government/departments/recreation/recreation-centers/bostonia-community-center. Site visited August 13, 2025.

City of El Cajon. 2025d. Kennedy Recreation Center & Skate Park. Online. https://www.elcajon.gov/your-government/departments/recreation/recreation-centers/kennedy-recreation-center-skate-park. Site visited August 13, 2025.

City of El Cajon. 2025e. Ronald Reagan Community Center. Online. https://www.elcajon.gov/your-government/departments/recreation/rental-banquet-facilities/ronald-reagan-community-center. Site visited August 13, 2025.

County of San Diego Parks and Recreation. 2025a. Nancy Jane. Online. https://www.sdparks.org/content/sdparks/en/park-pages/NancyJane.html. Site visited April 15, 2025.

County of San Diego Parks and Recreation. 2025b. Old Ironsides County Park. Online. https://www.sdparks.org/content/sdparks/en/park-pages/OldIronsides.html. Site visited April 15, 2025.

County of San Diego Parks and Recreation. 2025c. South Lane. Online. https://www.sdparks.org/content/sdparks/en/park-pages/SouthLane.html. Site visited April 15, 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Site visited April 11, 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 19, 2025.

Dehesa School District. 2025. Dehesa School District. Online. https://dehesasd.net/. Site visited April 11, 2025.

Google. Google Earth Pro Version 7.3.6.10201 Software. Program used April 21, 2025.

Grossmont Union High School District. 2025. Grossmont Union High School District. Online. https://www.guhsd.net/. Site visited April 11, 2025.

Heartland Fire & Rescue. 2024. Annual Report. Online. https://heartlandfire.org/1322/Annual-Report. Site visited August 13, 2025.

Heartland Fire & Rescue. 2025a. About Us. Online. https://www.heartlandfire.org/27/About-Us. Site visited August 13, 2025.

Heartland Fire & Rescue. 2025b. Fire Station Locations & Jurisdiction. Online. https://www.heartlandfire.org/159/Fire-Station-Locations-Jurisdiction. Site visited August 13, 2025.

International Code Council. 2024. California Code of Regulations, Title 24. Online. https://codes.iccsafe.org/content/CAFC2022P3/california-code-of-regulations-title-24. Site visited April 11, 2025.

Jamul-Dulzura Union School District. 2025. About Us. Online. https://www.jdusd.net/apps/pages/index.jsp?uREC_ID=2985569&type=d&pREC_ID=2316304. Site visited August 13, 2025.

Salvation Army. 2025. El Cajon Corps. Online. https://elcajon.salvationarmy.org/. Site visited August 13, 2025.

San Diego County FPD. 2020. San Diego County Fire Strategic Plan 2020-2025. Online. https://www.sandiegocounty.gov/content/dam/sdc/sdcfa/documents/StratPlan/StratPlanCtyFire.pdf. Site visited April 11, 2025.

San Diego County FPD. 2025a. About Us. Online. https://www.sandiegocounty.gov/content/sdc/sdcfa.html. Site visited April 10, 2025.

San Diego County FPD. 2025b. Fire Stations. Online. https://www.sandiegocounty.gov/content/sdc/sdcfa/sdcfa/fire-stations.html. Site visited April 10, 2025.

San Diego County Library. 2025. Locations. Online. https://sdcl.bibliocommons.com/v2/locations?_gl=1*obgro1*_ga*MTYyNzY0MzI1OC4xNzQ0NzQ3NzY4*_ga_G99DMMNG39*czE3NTUxMjI3MzMkbzQkZzAkdDE3NTUxMjI3MzMkajYwJGwwJGgw. Site visited August 13, 2025.

San Diego County Sheriff's Office. 2025. About Us. Online. https://www.sdsheriff.gov/bureaus/about-us. Site visited April 11, 2025.

San Miguel Fire & Rescue. 2024. 2024 Annual Report. Online. https://www.sanmiguelfire.gov/files/13a9e985f/San_Miguel_Annual_Report_2024.pdf. Site visited April 10, 2025.

USDA. 2005. Land Management Plan. Online. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5270394.pdf. Site visited April 22, 2025.

USDA. 2025a. Safe and Effective Wildfire Response. Online. https://www.fs.usda.gov/managing-land/fire/response. Site visited April 19, 2025.

USDA. 2025b. Careers in Wildland Fire. Online. https://www.fs.usda.gov/working-with-us/careers/fire. Site visited April 19, 2025.

USDA. 2025c. USDA Forest Service Law Enforcement and Investigations. Online. https://www.fs.usda.gov/lei/job-opportunities.php. Site visited April 21, 2025.

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3.17 RECREATION

This section describes the existing conditions for recreation in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential environmental impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.17.1 Environmental Setting

3.17.1.1 Recreational Setting

A variety of recreation facilities and areas are located in the vicinity of the Proposed Project, ranging from a national forest to county parks. Recreation opportunities in the vicinity of the Proposed Project include hiking, camping, mountain biking, fishing, picnicking, tennis, and basketball. The recreation facilities and areas in the vicinity of the Proposed Project are described in Table 3.17-1: Recreation Facilities and Areas within 1 Mile of the Proposed Project and depicted in Figure 3.17-1: Recreation Facilities and Areas within 1 Mile of the Proposed Project. Trails in the vicinity of the Proposed Project are identified in Table 3.17-2: Trails and Pathways within 1 Mile of the Proposed Project. The California Riding and Hiking Trail (CRHT) and trail access at Loveland Reservoir are also depicted in Figure 3.17-1: Recreation Facilities and Areas within 1 Mile of the Proposed Project.

3.17.2 Regulatory Setting

3.17.2.1 Federal

3.17.2.1.1 National Forest Management Act of 1976

The National Forest Management Act of 1976 (16 United States [U.S.] Code 1600) clarifies the management of multiple resources and uses in national forests. The U.S. Forest Service (USFS) ensures that the National Forest System plans include outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness coordination.

3.17.2.1.2 Forest Service Strategic Plan (Fiscal Year [FY] 2015-2020)

The Forest Service Strategic Plan (FY 2015-2020) identifies objectives and goals for managing the National Forest System to maintain healthy, resilient, and productive forests and grasslands. The Forest Service Strategic Plan (FY 2015-2020) includes the following Strategic Objective that is relevant to recreation and the Proposed Project:

- **Strategic Objective F: Connect people to the outdoors**
  The Forest Service Strategic Plan (FY 2015-2020) identifies the following Means and Strategies for Strategic Objective F that are relevant to the Proposed Project:

  - Maintain recreational settings, hiking trails, and other sustainable recreational opportunities on the national forests and grasslands for public use.
  - Improve recreation facility accessibility.

3.17.2.1.3 Southern California National Forests Land Management Plan

Each national forest, grassland, and prairie managed by the USFS has an individual land management plan to guide specific uses such as timber harvest, primitive recreation, or rare plant protection. Part 1: Southern California National Forests Vision of the Land Management Plan and Part 2: Cleveland National Forest Strategy of the Land Management Plan outline goals and policies for providing and managing recreation opportunities (U.S. Department of Agriculture [USDA] 2005). Because the Proposed Project crosses the Cleveland National Forest, the following Land Management Plan goal is relevant to the Proposed Project:

- **Goal 3.1: Provide for Public Use and Natural Resource Protection.**
  Part 1: Southern California National Forests Vision of the Land Management Plan identifies the following components of Goal 3.1 that are relevant to the Proposed Project:

  - Recreation opportunities, outreach, activities and services contribute to urban community well-being and visitors' physical and mental well-being.
  - The transportation system of roads and trails is safe, affordable, and environmentally sound; responds to public needs; and is efficient to manage.

The following program strategies and tactics described in Part 2: Cleveland National Forest Strategy of the Land Management Plan are relevant to the Proposed Project:

- **Strategy REC 3: Recreation Participation.**

  - Offer a wide range of high-quality, environmentally sustainable developed and dispersed recreation opportunities to a rapidly growing and culturally diverse visitor population, with minimal visitor conflicts and effects on other resources.

- **Strategy Trans 3: Improve Trails.**

  - Develop an interconnected, shared-use trail network where compatible and support facilities complement local, regional and national trails and open space, and also enhance day-use opportunities and access for the general public.

  - Construct and maintain the trail network to levels commensurate with area objectives, sustainable resource conditions, user safety, and the type and level of use. Convert ecologically sustainable unclassified roads, trails, and other roads that meet the need for trail-based recreation.

3.17.2.2 State

No state plans, policies, regulations, or laws pertaining to recreation are relevant to the Proposed Project.

Table 3.17-1: Recreation Facilities and Areas within 1 Mile of the Proposed Project

Landowner/ Manager	Recreation Facility or Area	Uses	Approximate Acreage	Approximate Distance to the Proposed Project (miles)
Proposed 230 kV Transmission Line and Existing Suncrest Substation				
Sweetwater Authority	Loveland Reservoir	Hiking, fishing	2,075	Crossed
USFS	Cleveland National Forest	Hiking, fishing, hunting, camping, off-highway vehicle use	460,000	Crossed
California Department of Fish and Wildlife (CDFW)	Crestridge Ecological Reserve	Hiking, horseback riding, mountain biking	2,800	Crossed
County of San Diego (County)	Stoneridge Preserve	Use information not available	248	0.1
	Nancy Jane County Park	Picnicking, tennis, basketball, playground, horseshoes	1	0.4
	Old Ironsides County Park	Picnicking, playgrounds, basketball	4	0.7
	South Lane Park	Picnicking, hiking	11	0.9
Back Country Land Trust	Wright's Field	Hiking	231	1.0
Proposed Hospital Staging Yard				
City of El Cajon (City)	Albert Van Zanten Park	Picnicking, basketball, baseball, track, soccer, football	15.0	0.5
City	Bostonia Recreation Center	Picnicking, playground, play field	1.7	0.6
City	Kennedy Recreation Center & Skate Park	Picnicking, playground, basketball, skateboarding, baseball	10.2	0.7
Proposed Greenfield Staging Yard				
CDFW	Crestridge Ecological Reserve	Hiking, horseback riding, mountain biking	2,800	0.6
City	Kennedy Recreation Center & Skate Park	Picnicking, playground, basketball, skateboarding, baseball	10.2	0.7
Proposed Sweetwater Staging/Fly Yard				
Sweetwater Authority	Loveland Reservoir	Hiking, fishing	2,075	Crossed

Landowner/ Manager	Recreation Facility or Area	Uses	Approximate Acreage	Approximate Distance to the Proposed Project (miles)
USFS	Cleveland National Forest	Hiking, fishing, hunting, camping, off-highway vehicle use	460,000	0.2
Proposed High Glen Staging Yard				
USFS	Cleveland National Forest	Hiking, fishing, hunting, camping, off-highway vehicle use	460,000	<0.1
Proposed High Glen Fly Yard				
USFS	Cleveland National Forest	Hiking, fishing, hunting, camping, off-highway vehicle use	460,000	<0.1
Proposed Swat Yard				
USFS	Cleveland National Forest	Hiking, fishing, hunting, camping, off-highway vehicle use	460,000	0.2
Proposed Lyons Valley Staging/Fly Yard				
USFS	Cleveland National Forest	Hiking, fishing, hunting, camping, off-highway vehicle use	460,000	<0.1

Sources: California Protected Areas Database 2025; CDFW 2025; City 2025a, 2025b, 2025c; County of San Diego Parks and Recreation (County Parks) 2013, 2025a, 2025b, 2025c; Get Outside San Diego 2017; Google 2025; Sweetwater Authority 2025; USDA 2025a, 2025b

Table 3.17-2: Trails and Pathways within 1 Mile of the Proposed Project

Landowner/ Manager	Recreation Area	Trail or Pathway Name	Approximate Distance to the Proposed Project (miles)	Trail or Pathway Information
Proposed 230 kV Transmission Line and Existing Suncrest Substation				
CDFW	Crestridge Ecological Reserve	Cross Timbers Trail	0.2	Trails and bypass open to hikers, mountain bikers, and equestrians, providing opportunities for viewing wildlife and native plant communities
		Rutzville Trail	0.3	
		Quail Run Trail	0.4	
		Lake View Trail	0.5	
		Den Trail	0.6	
		Tank to Tail Trail	0.6	
		Valley View Truck Trail	0.6	
		"A" Game Trail	0.6	
		Kid's Loop Trail	0.8	
		Horned Lizard Bypass	0.9	
Information Not Available	Not Applicable (N/A)	Glens Trail	0.1	Approximately 2.7 miles of trail in Alpine with connectivity to surrounding trails such as the Japatul Trail and Lawson Valley Connector Trail
Information Not Available	N/A	North Loveland Reservoir Trail	0.3	Approximately 2.5 miles of trail in Alpine with connectivity to the CRHT and views of Loveland Reservoir
Information Not Available	N/A	Bell Bluff Trail	0.4	Approximately 5.1 miles of trail with connectivity to the CRHT, Cleveland National Forest, and the community of Descanso
Information Not Available	N/A	Loveland Reservoir Trail	Trail Crossed	Approximately 0.9 mile of trail from Japatul Road to Loveland Reservoir

Landowner/ Manager	Recreation Area	Trail or Pathway Name	Approximate Distance to the Proposed Project (miles)	Trail or Pathway Information
San Diego County Trails Council	N/A	CRHT	Trail Crossed	The California Riding and Hiking Trail Act of 1945 called for 3,000 miles of trail extending from San Diego County to the Oregon border, and the San Diego County Trails Council has managed and restored approximately 100 miles of the CRHT in San Diego County since 1983.
N/A	N/A	La Cresta Pathways	Pathway Crossed	Pathways and trail proposed by the Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan
		Cerro Sereno/Camino Monta Sombra	0.2	
		Suncrest Pathways	0.4	
		Peutz Valley West Trail	0.4	
		Harbison Canyon Pathway	0.4	
		Dehesa Road Pathway	0.4	
		Granite Hills/Flume Drive Pathway	0.8	
N/A	N/A	La Cresta Trails	Trail Crossed	Trails proposed by the Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan
		Sycuan Overlook Trail	Trail Crossed	
		Crest Sky Watchers Loop System Trail	Trail Crossed	
		Wilson Trail	Trail Crossed	
		Dehesa-Harbison-Alpine Connector Trail	Trail Crossed	
		Wilson Shortcut Trail	0.1	
		Suncrest Trails	0.2	
		Singing Hills Memorial Park Loop Trail	0.5	
		Avocado Trail	0.8	
		Skeletal Plains Trail	0.8	
		Harbison Canyon Trail	0.9	

Landowner/ Manager	Recreation Area	Trail or Pathway Name	Approximate Distance to the Proposed Project (miles)	Trail or Pathway Information
N/A	N/A	Tavern Road Pathway	Pathway Crossed	Pathways proposed by the Alpine Community Trails and Pathways Plan
		Sequan Truck Trail Pathway	Pathway Crossed	
		Japatul Road Pathway	Pathway Crossed	
		South Grade Road Pathway	0.8	
		Harbison Canyon Road Pathway	0.9	
N/A	N/A	South Loveland Reservoir Trail	Trail Crossed	Trails proposed by the Alpine Community Trails and Pathways Plan
		McGinty Loop Trail	0.2	
		Old Spur Trail	0.9	
		Sky Mesa Loop Trail	1.0	
		Findel Ranch Loop Trail	1.0	
Proposed Hospital Staging Yard				
Information Not Available	N/A	Valley View Truck Trail	1.0	Trails open to hikers, mountain bikers, and equestrians, providing opportunities for viewing wildlife and native plant communities
N/A	N/A	Hillsdale/Vista Grande Extension Pathway	1.0	Pathway proposed by the Valle De Oro Community Trails and Pathways Plan
N/A	N/A	Granite Hills/Flume Drive Pathway	Pathway Crossed	Pathways proposed by the Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan
		North Granite Hills Pathways	0.3	
		Cerro Sereno/Camino Monta Sombra Pathway	0.4	
		Central Granite Hills Pathways	0.6	

Landowner/ Manager	Recreation Area	Trail or Pathway Name	Approximate Distance to the Proposed Project (miles)	Trail or Pathway Information
N/A	N/A	Granite Hills/Garrison Trail	0.7	Trails and pathways proposed by the Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan
		Central Granite Hills Pathways	0.8	
		Suncrest Trails	0.9	
		South Granite Hills Trails	0.9	
N/A	N/A	Petite Lane Trail	0.7	Trail proposed by the Lakeside Community Trails and Pathways Plan
Proposed Greenfield Staging Yard				
N/A	N/A	Valley View Truck Trail	1.0	Trails open to hikers, mountain bikers, and equestrians, providing opportunities for viewing wildlife and native plant communities
N/A	N/A	North Granite Hills Pathways	0.2	Pathways proposed by the Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan
		Granite Hills/Flume Drive Pathway	0.7	
		Central Granite Hills Pathways	0.9	
N/A	N/A	Petite Lane Trail	0.7	Trail proposed by the Lakeside Community Trails and Pathways Plan
Proposed Sweetwater Staging/Fly Yard				
San Diego County Trails Council	N/A	CRHT	<0.1	The California Riding and Hiking Trail Act of 1945 called for 3,000 miles of trail extending from San Diego County to the Oregon border, and the San Diego County Trails Council has managed and restored approximately 100 miles of the CRHT in San Diego County since 1983.
N/A	N/A	Japatul Road Pathway	Path Crossed	Pathway proposed by the Alpine Community Trails and Pathways Plan
		Sequan Truck Trail Pathway	0.6	
		Tavern Road Pathway	0.6	

Landowner/ Manager	Recreation Area	Trail or Pathway Name	Approximate Distance to the Proposed Project (miles)	Trail or Pathway Information
N/A	N/A	North Loveland Reservoir Trail	0.7	Trail proposed by the Alpine Community Trails and Pathways Plan
		Findel Ranch Loop Trail	1.0	
		South Loveland Reservoir Trail	1.0	
Proposed High Glen Staging Yard				
Information Not Available	Cleveland National Forest	Glens Trail	0.3	Approximately 2.7 miles of trail in Alpine with connectivity to surrounding trails such as the Japatul Trail and Lawson Valley Connector Trail
N/A	Cleveland National Forest	Japatul Trail	0.4	Trails and pathway proposed by the Alpine Community Trails and Pathways Plan
		Maguay Loop Trail	0.7	
		Japatul Road Pathway	1.0	
Proposed High Glen Fly Yard				
Information Not Available	Cleveland National Forest	Glens Trail	0.1	Approximately 2.7 miles of trail in Alpine with connectivity to surrounding trails such as the Japatul Trail and Lawson Valley Connector Trail
N/A	Cleveland National Forest	Japatul Trail	0.5	Trails proposed by the Alpine Community Trails and Pathways Plan
		Maguay Loop Trail	1.0	
Proposed Swat Staging Yard				
Information Not Available	Cleveland National Forest	Skye Valley Trail	<0.1	Approximately 3.7 miles of trail with connectivity to Barret Lake Road Pathway and Barret Lake Valley Trail
Information Not Available	Cleveland National Forest	Lawson Peak Trail	0.3	Approximately 4.5 miles of trail from Lyons Valley Road to Lawson Peak

Landowner/ Manager	Recreation Area	Trail or Pathway Name	Approximate Distance to the Proposed Project (miles)	Trail or Pathway Information
Information Not Available	Cleveland National Forest	Barret Lake Valley Trail	0.5	Approximately 1.9 miles of trail with connectivity to Barrett Lake Trail and Skye Valley Trail
N/A	Cleveland National Forest	Western Shore Trail	0.5	Trails proposed by the Jamul-Dulzura Community Trails and Pathways Plan
		Carve Acre Extension Trail	0.6	
Proposed Lyons Valley Staging/Fly Yard				
N/A	Cleveland National Forest	Barrett Lake Road Pathway	0.4	Pathway proposed by the Jamul-Dulzura Community Trails and Pathways Plan
N/A	Cleveland National Forest	Skye Valley Trail	0.3	Approximately 3.7 miles of trail with connectivity to Barret Lake Road Pathway and Barret Lake Valley Trail
N/A	Cleveland National Forest	Barrett Lake Valley Trail	0.9	Approximately 1.9 miles of trail with connectivity to Barrett Lake Trail and Skye Valley Trail
N/A	Cleveland National Forest	Barret Lake Road/Lake Trail Connector Trail	0.4	Trails proposed by the Jamul-Dulzura Community Trails and Pathways Plan
N/A		Carve Acre Extension Trail	0.9	
N/A		Barrett Lake Trail	1.0	

Sources: AllTrails 2025; CDFW 2025; County of San Diego 2005a, 2005b, 2005c, 2005d, 2005e, 2005f

Note: Existing and proposed trails identified in the Alpine, Crest-Dehesa, Jamul-Dulzura, Lakeside, and Valle De Oro community trails and pathways plans that are located within 1 mile of the Proposed Project are included in this table. For some trails and pathways, landowner/manager information was not available online or through contacting County Parks.

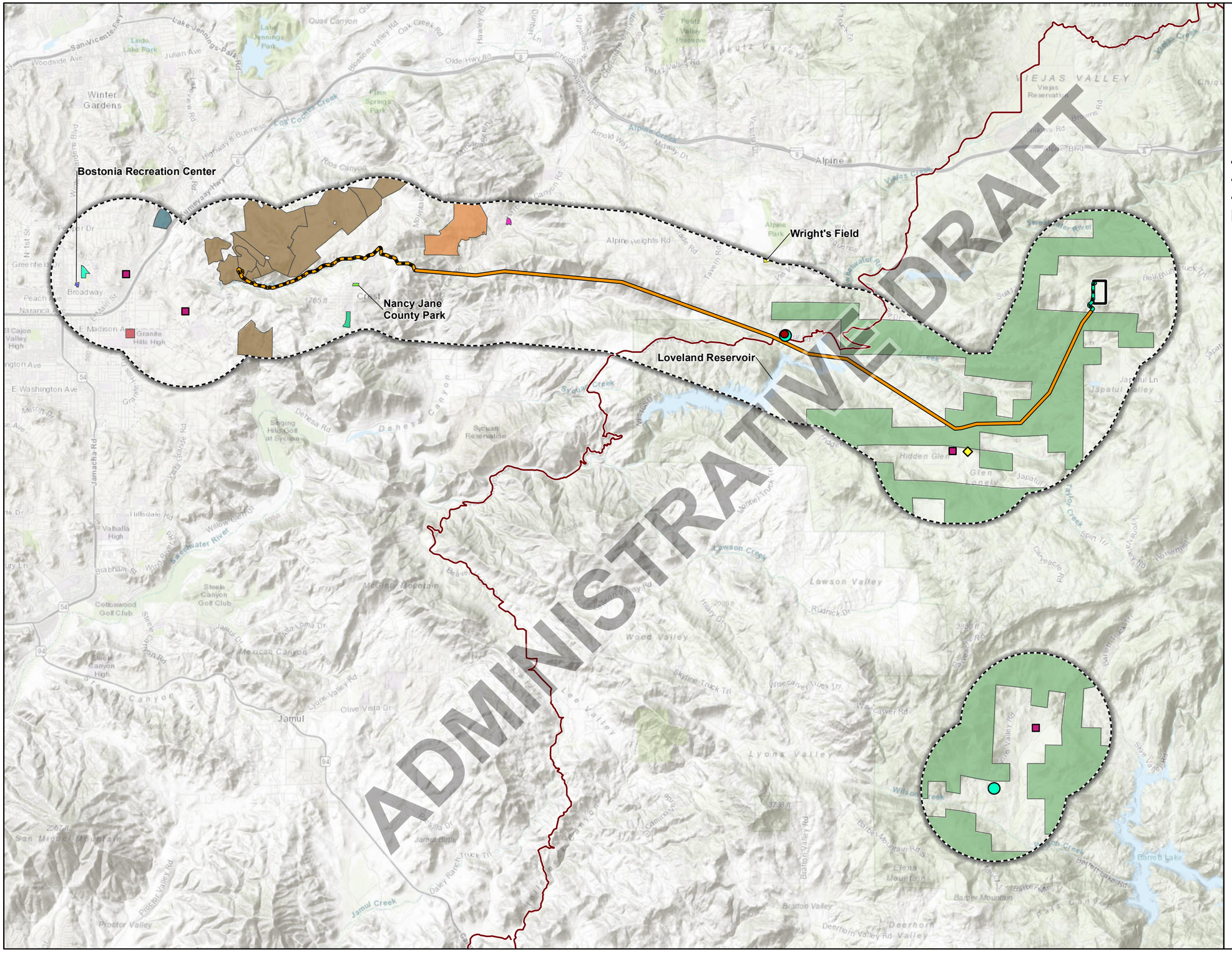

Figure 3.17-1:
Recreation Facilities and Areas within 1 Mile of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer

Recreation Area

- Loveland Reservoir Trailhead
- California Riding and Hiking Trail
- Albert Van Zanten Park
- Bostonia Recreation Center
- CalTrans TransNet Environmental Mitigation
- Cleveland National Forest
- Crestridge Ecological Reserve
- Kennedy Recreation Center & Skate Park
- Nancy Jane County Park
- Old Ironsides County Park
- South Lane Park
- Stoneridge Preserve
- Wright's Field

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3.17.2.3 Local

3.17.2.3.1 County of San Diego

Preserve Trail Guidelines

The Preserve Trail Guidelines, prepared by County Parks, inform the development of preserve trail systems that provide public access to County-owned and -managed lands while protecting biological and cultural resources. The guidelines outline the design, siting, construction, and management of preserve trails. The guidelines do not contain goals or policies relevant to the Proposed Project.

Community Trails Master Plan

The County's Community Trails Master Plan (CTMP) guides the development and management of community trails in unincorporated San Diego County. The CTMP includes trail needs in San Diego County, goals and policies, trail planning considerations, design and construction guidelines, and trail management tools. The following CTMP implementation strategy is relevant to the Proposed Project:

- **Strategy CIS 1.6:** Consider shared-use of public utility easements if beneficial to the trail system.

Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan

The Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan inventories existing trails in the communities, calculates community trail needs, summarizes countywide goals and policies, and outlines implementation strategies specific to the Crest, Dehesa, Granite Hills, Harbison Canyon Community Planning Group. The plan does not contain policies relevant to the Proposed Project.

Alpine Community Trails and Pathways Plan

The Alpine Community Trails and Pathways Plan inventories existing trails in the communities, calculates community trail needs, and describes the applicability of countywide goals and policies. The plan does not contain policies relevant to the Proposed Project.

Jamul-Dulzura Community Trails and Pathways Plan

The Jamul-Dulzura Community Trails and Pathways Plan inventories existing trails in the communities, calculates community trail needs, and describes the applicability of countywide goals and policies. The plan does not contain policies relevant to the Proposed Project.

Lakeside Community Trails and Pathways Plan

The Lakeside Community Trails and Pathways Plan inventories existing trails in the communities, calculates community trail needs, and describes the applicability of countywide goals and policies. The plan does not contain policies relevant to the Proposed Project.

Valle De Oro Community Trails and Pathways Plan

The Valle De Oro Community Trails and Pathways Plan inventories existing trails in the communities, calculates community trail needs, and describes the applicability of countywide goals and policies. The plan does not contain policies relevant to the Proposed Project.

County of San Diego Parks Master Plan

The County's Parks Master Plan, prepared by County Parks, is a guidance document for the acquisition and development of parks and recreation facilities in unincorporated San Diego County. The plan inventories existing parks and recreation amenities, examines park trends, projects the quantity of future parkland acquisition to meet county standards and goals, and identifies potential future parkland sites. The plan does not contain goals or policies relevant to the Proposed Project.

San Diego County General Plan

The Parks and Recreation section of the San Diego County General Plan's Conservation and Open Space element contains goals and policies for the development, maintenance, management, and operation of parks and recreation facilities in San Diego County. The following policy is relevant to the Proposed Project:

- **Policy COS-23.2: Regional Coordination.** Coordinate the planning, acquisition, protection, development, and management of open space among governmental agencies and private organizations to maximize opportunities to link regional open space lands.

The Bicycle, Pedestrian, and Trail Facilities section of the San Diego County General Plan's Mobility Element outlines goals and policies for the provision and management of bicycle and pedestrian networks and facilities in San Diego County. The following policy is relevant to the Proposed Project:

- **Policy M-12.6: Trail Easements, Dedications, and Joint-Use Agreements.** Promote trail opportunities by obtaining easements, dedications, license agreements, or joint-use agreements from other government agencies and public and semi-public agencies.

Alpine Community Plan

The Conservation and Open Space section of the Draft Alpine Community Plan contains goals and policies for the development, maintenance, management, and operation of parks and recreation facilities in Alpine. The following policy is relevant to the Proposed Project:

- **Policy COS-4.3:** Coordinate with water districts to maximize recreational activities such as hiking and fishing at El Capitan and Loveland Reservoirs.

3.17.2.3.2 City of El Cajon

City of El Cajon General Plan

The City General Plan was reviewed, and no policies relevant to the Proposed Project and recreation were identified.

3.17.3 Impact Analysis and Mitigation Measures

3.17.3.1 Analysis Methodology

Evaluation of potential recreation impacts was based on a review of local, state, and federal recreation documents; the San Diego County General Plan; City of San Diego General Plan; and desktop review of the Proposed Project Area. Impacts on recreation that could result from implementation of the Proposed Project were identified by comparing the baseline use and provision of recreation resources to future use and demand for recreation resources from implementation of the Proposed Project.

3.17.3.2 Applicant-Proposed Measures

The following applicant-proposed measures (APMs) would be implemented for the Proposed Project:

- **APM REC-01:** SDG&E will post signage at access points to recreational facilities that may be subject to access restrictions due to the Project no less than four weeks prior to the beginning of construction activities within or adjacent to the facilities. In addition, SDG&E will coordinate with the appropriate agency so that notification can be posted to the recreational facility's website. The website and signage will notify users of the impending construction activities, construction impacts (e.g., increased noise and dust), the affected locations, and the estimated duration of any necessary temporary closures or access restrictions. Contact information for the Project's public liaison will be provided on the signage, and the public liaison would address any complaints related to dust, noise, and access restrictions.

- **APM REC-02:** Authorities for recreational facilities that may be subject to access restrictions will be directly contacted and given advance notice of Project activities no less than four weeks prior to construction.

3.17.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For recreation, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

3.17.3.4 Impact Analysis

3.17.3.4.1 Impact REC-01: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such

that substantial physical deterioration of the facility would occur or be accelerated?

Construction, Operations and Maintenance

Less-Than-Significant Impact. The use of parks and recreational facilities is closely tied to population; as population increases, the use of existing parks and recreational facilities can be expected to increase proportionally. Similarly, the loss of existing parks and recreational facilities would increase the demand for any remaining parks and facilities.

As discussed in Section 3.15 Population and Housing, the Proposed Project would not directly or indirectly induce substantial unplanned population growth. Construction of the Proposed Project is anticipated to occur for approximately 24 months, and during peak times, 50 workers per day would be utilized. During construction, regional and local parks may be used by workers during non-working hours by any workers that may temporarily relocate to the area; however, the duration of construction activities and number of construction workers anticipated to use recreational facilities during non-working hours would not result in a significant increase in the use of existing parks or recreational facilities.

The proposed Sweetwater Staging/Fly Yard would occupy the eastern portion of the public parking lot for Loveland Reservoir for the 18-month construction duration of the proposed 230 kV transmission line. The parking lot is adjacent to the public access point to Loveland Reservoir, the Loveland Reservoir Trail. No other public parking lots or options for parking in residential neighborhoods are located near public access to Loveland Reservoir. The closest residential area to the Loveland Reservoir public access, located approximately 0.7 mile northwest of the Loveland Reservoir parking lot, is a gated neighborhood inaccessible to the public. As a result, the proposed Sweetwater Staging Yard would reduce the number of available parking spots in the Loveland Reservoir parking lot, limiting parking to access Loveland Reservoir and Loveland Reservoir Trail. SDG&E would implement APM REC-01 to post signage at the parking lot, post a notice on the Loveland Reservoir website, and provide advanced notice of Proposed Project activities before construction. Per APM REC-02, SDG&E would give advance notice of Proposed Project activities to authorities for recreational facilities subject to access restrictions no less than 4 weeks before construction. The reduced parking lot capacity may result in a minor increase in use of other reservoirs or trails during the 18-month construction period of the proposed 230 kV transmission line. However, as the parking lot capacity reduction would only reduce access to the Loveland Reservoir and Loveland Reservoir Trail, the access reduction would not significantly increase the use of existing parks or recreational facilities. Several other recreation facilities and trails are located near the Proposed Project, as described in Table 3.17-1: Recreation Facilities and Areas within 1 Mile of the Proposed Project and Table 3.17-2: Trails and Pathways within 1 Mile of the Proposed Project. Recreationists that may use other recreation facilities or trails during construction due to the temporary reduction in the capacity of the Loveland Reservoir parking lot are anticipated to be distributed across recreation facilities and trails rather than concentrated at a single recreation facility or trail, so a significant increase in the use of any one existing park or recreational facility is not anticipated to occur during construction of the Proposed Project.

Further, temporary use restrictions along two existing trails would be implemented for public safety. The proposed 230 kV overhead segment would cross the Loveland Reservoir Trail and

CRHT, and sections of trail at the points of the transmission line crossings would be temporarily and intermittently closed during the 18-month construction period of the proposed 230 kV transmission line. Other sections of the CRHT and a portion of the Loveland Reservoir Trail would remain accessible during the periods of construction activities rather than closing the entire trails. Short sections of the trails would be closed for 1 to 2 days intermittently during the 18-month construction period while work is conducted at a site on or adjacent to a trail. In total, trail section closures are not anticipated to exceed 30 days over the duration of the 18-month construction period of the proposed 230 kV transmission line. SDG&E would implement APM REC-01 to post signage at the trails, post a notice on the appropriate websites, and provide advanced notice of Proposed Project activities prior to construction. In accordance with APM REC-02, SDG&E would give advance notice of Proposed Project activities to authorities for recreational facilities subject to access restrictions no less than 4 weeks prior to construction. The temporary trail section closures may result in minor, temporary increased use of other trails. However, as only two existing trails may require temporary closures of only short sections of the trails, the trail section closures would not result in a significant increase in the use of existing parks or recreational facilities. As previously described, several other trails are located near the Proposed Project Area, as summarized in Table 3.17-2: Trails and Pathways within 1 Mile of the Proposed Project, and recreationists could use these trails during temporary closures of sections of the Loveland Resrvoir Trail and CRHT. Options near the Loveland Reservoir Trail and CRHT include the Bell Bluff Trail and the Sloane Canyon Trail, which are located approximately 1.5 miles northeast and 2.7 miles southwest, respectively, from the area of the Loveland Reservoir Trail and CRHT closures. Recreationists who may use other trails during the temporary Loveland Reservoir Trail and CRHT section closures are anticipated to be distributed across trails rather than concentrated at a single trail, so a significant increase in the use of any one trail is not anticipated to occur during construction of the Proposed Project.

Therefore, impacts to existing parks or recreational facilities would be less than significant. The minor, temporary increased use would not accelerate substantial physical deterioration of existing parks and recreational facilities. O&M of the Proposed Project would be conducted under SDG&E's existing O&M program serving the Proposed Project Area, and maintenance activities would continue as they currently do in the area. O&M activities would not increase the use of existing parks or other recreational facilities. As a result, impacts would be less than significant.

3.17.3.4.2 Impact REC-02: Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Construction, Operations and Maintenance

No Impact. The Proposed Project does not include the construction of any recreational facilities. O&M of the Proposed Project would be conducted under SDG&E's existing O&M program serving the Proposed Project Area, and maintenance activities would continue as they currently do in the area; therefore, the Proposed Project would not require the construction or expansion of any recreational facilities in the future. The Proposed Project would not have an adverse physical effect on the environment from the construction of new recreational facilities or the expansion of existing recreational facilities. Therefore, no impact would occur.

3.17.4 References

AllTrails. 2025. Loveland Reservoir Trail. Online. https://www.alltrails.com/trail/us/california/loveland-reservoir-trail. Site visited July 10, 2025.

California Protected Areas Database. 2025. Get CPAD/CCED Data. Online. https://calands.org/get-data/. Site visited April 15, 2025.

CDFW. 2025. Crestridge Ecological Reserve. Online. https://wildlife.ca.gov/Lands/Places-to-Visit/Crestridge-ER. Site visited April 18, 2025.

City of El Cajon. 2001. City of El Cajon General Plan 2000. Online. https://www.elcajon.gov/home/showpublisheddocument/140/635497086233100000. Site visited August 14, 2025.

City of El Cajon. 2025a. Albert Van Zanten Park. Online. https://www.elcajon.gov/discover-el-cajon/city-attractions/parks-playgrounds-sports-fields. Site visited August 13, 2025.

City of El Cajon. 2025b. Bostonia Recreation Center. Online. https://www.elcajon.gov/your-government/departments/recreation/recreation-centers/bostonia-community-center. Site visited August 13, 2025.

City of El Cajon. 2025c. Kennedy Recreation Center & Skate Park. Online. https://www.elcajon.gov/your-government/departments/recreation/recreation-centers/kennedy-recreation-center-skate-park. Site visited August 13, 2025

Congress.gov. 2025. H.R.15069 - National Forest Management Act. Online. https://www.congress.gov/bill/94th-congress/house-bill/15069. Site visited April 18, 2025.

County of San Diego. 2005a. Alpine Community Trails and Pathways Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/CTMP/trails-and-pathways-plan/AlpineCommunityTrailsandPathwaysPlan.pdf. Site visited April 29, 2025.

County of San Diego. 2005b. Crest, Dehesa, Granite Hills, Harbison Canyon Community Trails and Pathways Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/CTMP/trails-and-pathways-plan/Crest-DehesaCommunityTrailsandPathwaysPlan.pdf. Site visited April 29, 2025.

County of San Diego. 2005c. Community Trails Master Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/community-trails-master-plan.html. Site visited April 18, 2025.

County of San Diego. 2005d. Jamul-Dulzura Community Trails and Pathways Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/CTMP/maps/Jamul-Dulzura.pdf. Site visited August 12, 2025.

County of San Diego. 2005e. Lakeside Community Trails and Pathways Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/CTMP/maps/Lakeside.pdf. Site visited August 14, 2025.

County of San Diego. 2005f. Valle De Oro Community Trails and Pathways Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/CTMP/maps/ValleDeOro.pdf. Site visited August 14, 2025

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Site visited April 11, 2025.

County of San Diego. 2020. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited November 19, 2025.

County Parks. 2013. Resource Management Plan for Stoneridge Preserve San Diego County. Online. https://www.sdparks.org/content/dam/sdparks/en/pdf/Resource-Management/mscp/MSCP/Documents/RMD/RMPs%20and%20Trails/Stoneridge_RMP_Final.pdf. Site visited April 18, 2025.

County Parks. 2018. Preserve Trail Guidelines. Online. https://www.sdparks.org/content/dam/sdparks/en/pdf/Resource-Management/Final%20Preserve%20Trail%20Guidelines_April%202018.pdf. Site visited April 18, 2025.

County Parks. 2020. County of San Diego Parks Master Plan. Online. https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/Parks%20Master%20Plan.pdf. Site visited April 18, 2025.

County Parks. 2025a. Nancy Jane. Online. https://www.sdparks.org/content/sdparks/en/park-pages/NancyJane.html. Site visited April 18, 2025.

County Parks. 2025b. Old Ironsides County Park. Online. https://www.sdparks.org/content/sdparks/en/park-pages/OldIronsides.html. Site visited April 18, 2025.

County Parks. 2025c. South Lane County Park. Online. https://www.sdparks.org/content/sdparks/en/park-pages/SouthLane.html. Site visited April 18, 2025.

Get Outside San Diego. 2017. Park: Wright's Field. Online. https://www.getoutsidesandiego.org/parkmaps/_399.pdf. Site visited April 18, 2025.

Google. 2025. Google Earth Pro Version 7.3.6.10201 Software. Program used April 18, 2025.

Sweetwater Authority. 2025. Loveland Reservoir. Online. https://www.sweetwater.org/256/Loveland-Reservoir. Site visited April 18, 2025.

USDA. 2005. Land Management Plan.

USDA. 2015. Forest Service Strategic Plan: FY 2015-2020. Online. https://www.fs.usda.gov/sites/default/files/strategic-plan%5B2%5D-6_17_15_revised.pdf. Site visited September 9, 2025.

USDA. 2025a. Cleveland National Forest Home Page. Online. https://www.fs.usda.gov/cleveland/. Site visited April 18, 2025.

USDA. 2025b. About the Forest. Online. https://www.fs.usda.gov/main/cleveland/about-forest. Site visited April 18, 2025.

3.18 TRANSPORTATION

This section describes the existing conditions for transportation in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.18.1 Environmental Setting

3.18.1.1 Roadway System

The Proposed Project Area is surrounded by a network of state, county, and city roadways. The Federal Highway Administration (FHWA) classifies urban and rural roadways based on their function. The functional classification defines the role that each type of roadway plays in the overall transportation system (FWHA 2023). FWHA defines each roadway classification as follows:

- Interstates: Interstates are the highest classification of arterials and were designed and constructed with mobility and long-distance travel in mind.

- Other freeways and expressways: Roadways in this functional classification category look very similar to interstates. While there can be regional differences in the use of the terms “freeway” and “expressway,” for the purpose of functional classification, the roads in this classification have directional travel lanes, are usually separated by some type of physical barrier, and their access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections.

- Other principal arterials: These roadways serve major centers of metropolitan areas, provide a high degree of mobility, and can also provide mobility through rural areas. Unlike their access-controlled counterparts, abutting land uses can be served directly.

- Minor arterials: Minor arterials provide service for trips of moderate length, serve geographic areas that are smaller than their higher arterial counterparts, and offer connectivity to the higher arterial system. In an urban context, they interconnect and augment the higher arterial system, provide intra-community continuity and may carry local bus routes. In rural settings, minor arterials in rural areas are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement.

- Major and minor collectors: Collectors serve a critical role in the roadway network by gathering traffic from local roads and funneling them to the arterial network.

- Local roads: Locally classified roads account for the largest percentage of all roadways in terms of mileage. They are not intended for use in long-distance travel, except at the origin or destination end of the trip, due to their provision of direct access to abutting land (FHWA 2023).

3.18.1.1.1 Regional Transportation Circulation

In the unincorporated areas of San Diego County, the transportation system is dominated by its road network. Due to the rural character of these areas, motorists are the primary users of this system; however, transit riders, bicyclists, pedestrians, and equestrians also rely on the network for mobility within the county. The county's road system is made up of state highways, county roads, and private roads. State highways and major regional arterials in the unincorporated areas of the county are part of a larger transportation network that connects with the interstate highway system, allowing for travel both within the region and to other counties (County of San Diego 2011a).

The City of El Cajon's (City's) existing transportation system is composed of a network of federal, state, and city roads, as well as regional transit systems (i.e., the San Diego Metropolitan Transit System [MTS]). The City's vision for its transportation system places an emphasis on public transportation, the interrelation of transportation and land uses, and the efficiency of traffic movement (City of El Cajon 2001).

Figure 3.18-1: Regional Transportation Circulation illustrates the transportation-related infrastructure in the vicinity of the proposed 230 kV transmission line and existing Suncrest Substation. Transportation circulation in the Proposed Project Area is described in more detail in the following sections.

3.18.1.1.2 Local Transportation Circulation and Existing Roadways

The Proposed Project would primarily cross open space/undeveloped land, existing road rights-of-way (ROWs), and residential areas, as well as parallel existing electrical infrastructure. The 2025 average vehicle miles traveled (VMT) per resident per day by census tract in the vicinity of the proposed 230 kV transmission line and existing Suncrest Substation is 29.1 (San Diego Association of Governments [SANDAG] 2025a). The local circulation system near the Proposed Project Area is primarily composed of maintained two-lane roadways. The western end of the proposed 230 kV western underground (UG) segment would be located within Vista De Montemar, a private road located on land owned by the California Department of Fish and Wildlife.

The remainder of the proposed 230 kV western UG segment would be located within La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive, which are all east-west public roads. La Cresta Boulevard is a north-south public road that intersects La Cresta Road and Mountain View Road along the proposed 230 kV UG segment. Harbison Canyon Road is a north-south road that intersects the very western end of the proposed 230 kV overhead (OH) segment. Dehesa Road, Japatul Road, and Tavern Road are all east-west public roads that parallel, and at some points intersect, the proposed 230 kV OH segment. Bell Bluff Truck Trail is an east-west public road that leads directly to the existing Suncrest Substation from the east.

The proposed High Glen Yard would be located south of Japatul Road and off of High Glen Road—a north-south private access road—approximately 0.3 mile south of the eastern end of the proposed 230 kV OH segment. The Greenfield Yard would be located off of Greenfield Drive—an east-west public road—approximately 0.85 mile southwest of the proposed 230 kV western UG segment.

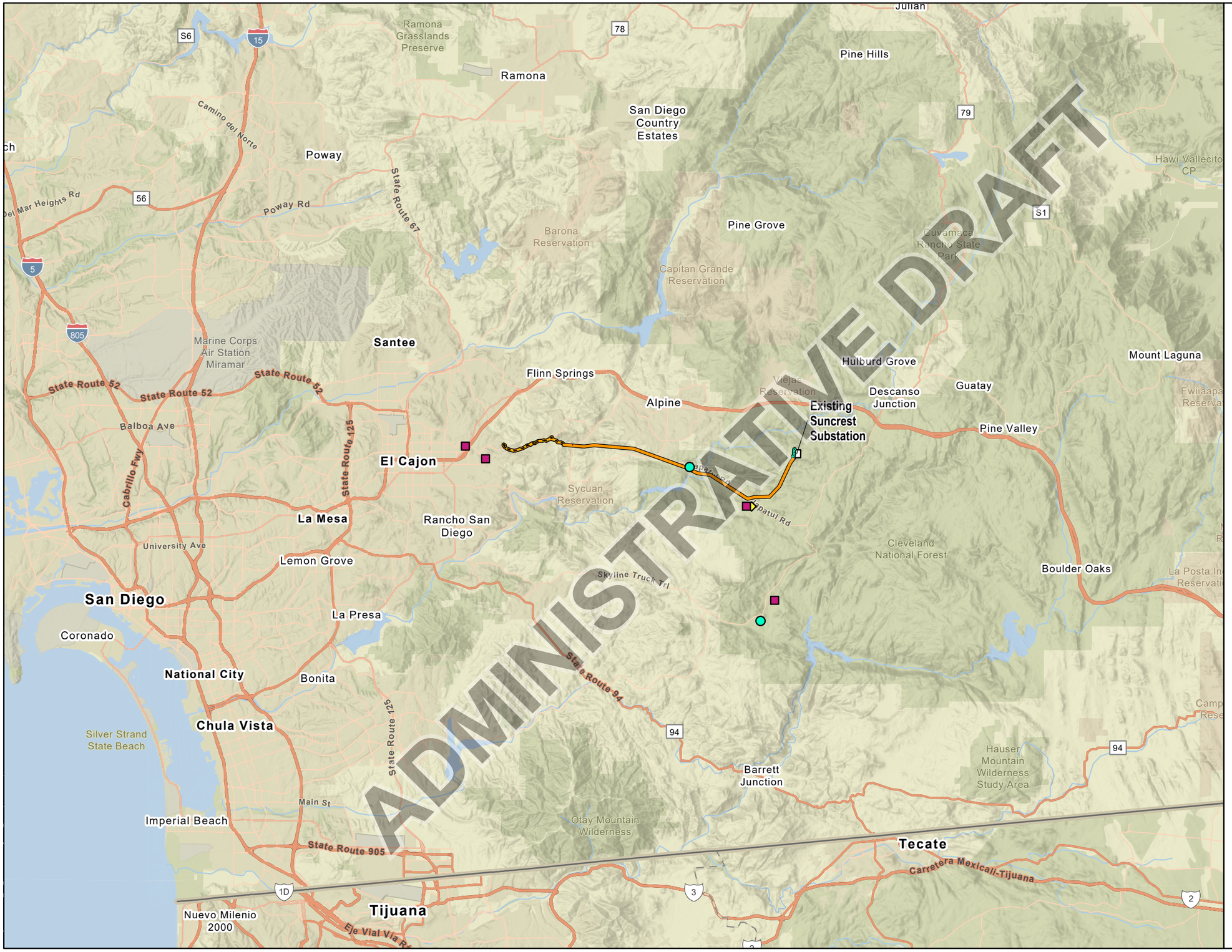

Figure 3.18-1:
Regional Transportation Circulation

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment

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The proposed Hospital Yard would be located on the corner of East Main Street—a north-south public roadway—and Greenfield Drive in El Cajon, approximately 1.5 miles west of the proposed 230 kV western UG segment. The proposed Swat Yard would be located off of Lyons Valley Road—a north-south public road—approximately 4.0 miles south of the eastern end of the proposed 230 kV OH segment.

A list of local roadways that could provide access during the Proposed Project construction is summarized in Table 3.18-1: Public Access Roadways. Attachment 3.18-A: Local Transportation Circulation provides an overview of local transportation-related infrastructure in the vicinity of the Proposed Project.

Interstate (I-) 8, State Route (SR-) 52, SR-67, and SR-94 are the major regional transportation corridors in the Proposed Project Area. I-8 is a major east-west regional transportation interstate located approximately 1.1 miles northwest of the Proposed Project, SR-52 is an east-west state highway located approximately 4.4 miles northwest of the Proposed Project, SR-67 is a north-south state highway located approximately 3.8 miles northwest of the Proposed Project, and SR-94 is a north-south state highway located approximately 5.7 miles south of the Proposed Project.

I-8 would serve as the regional route to the proposed 230 kV transmission line. The proposed 230 kV UG segment would be accessed on the western end via La Cresta Road, which can be accessed from multiple major collectors stemming from I-8. Vista De Montemar, Mountain View Road, Al Bahr Road, and Canyon Rim Drive would provide access to the remainder of the proposed 230 kV UG segment.

Harbison Canyon Road, which can be accessed from I-8 via a combination of minor arterials and major collectors, intersects the western end of the proposed 230 kV OH segment. Harbison Canyon Road, along with access roads stemming from Harbison Canyon Road, would be utilized to access the western portion of the proposed 230 kV OH segment. Japatul Road and Dehesa Road would be utilized to access much of the remainder of the proposed 230 kV OH segment. These roads both intersect Tavern Road, which is a roadway that extends directly from I-8 and intersects the Proposed Project's ROW north of Loveland Reservoir. Japatul Road parallels and intersects the proposed 230 kV OH segment on land managed by the United States (U.S.) Forest Service (USFS) (i.e., Cleveland National Forest) and Sweetwater Authority. Existing SDG&E access roads are located throughout the western portion of the proposed 230 kV OH segment on Sweetwater Authority-managed land. Many of these roads extend from Japatul Road and can provide access to much of the western portion of the proposed 230 kV OH segment. Other areas throughout the proposed 230 kV OH segment are non-motorized and would require access via helicopter or on foot. Bell Bluff Truck Trail would provide access to the existing Suncrest Substation and eastern end of the proposed 230 kV OH segment.

Table 3.18-1: Public Access Roadways

Roadway	Classification[1]	Number of Lanes	Average Annual Daily Traffic (AADT)[2]	Proximity to ROW/Staging Area	Jurisdiction
Al Bahr Road	Local Road	2	Information Not Available (INA)	Within ROW	County of San Diego
Bell Bluff Truck Trail	Local Road	2	INA	Intersects ROW	County of San Diego
Canyon Rim Drive	Local Road	2	INA	Within ROW	County of San Diego
Dehesa Road	Major Collector	2	INA	Intersects and parallels ROW	County of San Diego
East Main Street	Minor Arterial	6	160,000	Parallels the proposed Hospital Yard	City of El Cajon
Greenfield Drive	Major Collector	6	82,000	Parallels the proposed Hospital and Greenfield yards	City of El Cajon and County of San Diego
Harbison Canyon Road	Major Collector	2	49,500	Intersects and parallels ROW	County of San Diego
High Glen Road	Local Road	2	INA	Parallels the proposed High Glen Yard	County of San Diego
Japatul Road	Major Collector	2	INA	Intersects and parallels ROW	County of San Diego
La Cresta Boulevard	Minor Arterial	2	INA	Intersects ROW	County of San Diego
La Cresta Road	Minor Arterial	3	INA	Within ROW	County of San Diego
Lyons Valley Road	Major Collector	2	15,700	Parallels Swat Yard staging area	County of San Diego
Mountain View Road	Minor Arterial	2	INA	Within ROW	County of San Diego
Tavern Road	Minor Arterial	2	47,000	Intersects ROW	County of San Diego
Vista De Montemar	Local Road	2	INA	Within ROW	Private

Sources: California State Geoportal 2025; California Department of Transportation (Caltrans) 2023a, 2025; County of San Diego 2018b; Google Earth 2025; SANDAG 2025c

[1] FWHA roadway classifications are defined in Section 3.18.1.1 Roadway System.
[2] AADT volumes are given for the year 2023.

3.18.1.2 Railways

The rail lines closest to the Proposed Project Area are the North County Transit District (NCTD)-owned rail corridor—which provides rail transportation from the southern end of the City of Del Mar to the Orange County/San Diego County line—and the MTS-owned rail corridor, which provides rail transportation within the City of San Diego (San Diego Association of (SANDAG 2025b). Both rail corridors are part of the larger Los Angeles – San Diego – San Luis Obispo Rail Corridor (LOSSAN Rail Corridor) Agency, a joint powers authority composed of rail owners, operators, and planning agencies along the LOSSAN Rail Corridor. The LOSSAN Rail Corridor stretches from the City of San Diego to the City of San Luis Obispo and accommodated nearly 4.48 million trips in the 2023 to 2024 fiscal year (Orange County Transportation Authority [OCTA] 2025). The MTS Green Line Light Rail is the closest railway to the Proposed Project Area and is located approximately 4.8 miles west of the proposed 230 kV western UG segment.

3.18.1.3 Public Transit System

SANDAG is responsible for planning, programming, project development, and construction of transit systems in San Diego County. SANDAG's 2021 Regional Plan outlines goals for expanded transit services, along with other shared mobility options, to reduce the county's dependence on individual vehicles and build the foundation for a larger transportation system (SANDAG 2021). NCTD and MTS are the two agencies responsible for transit operations and services in the unincorporated areas of the county. Transit services are limited, consisting of regional and local bus services, as well as light rail (County of San Diego 2011a). The nearest transit routes to the Proposed Project are the MTS-owned and operated Route 838 East County Square – Alpine/Viejas and Route 864 El Cajon Transit Center – East County Square, located approximately 0.9 mile northwest of the proposed 230 kV western UG segment. Additionally, Route 864 El Cajon Transit Center – East County Square and Route 888 Jacumba Hot Springs – El Cajon, run along East Main Street, directly adjacent to the proposed Hospital Yard (MTS 2024).

3.18.1.3.1 Public Transit Infrastructure

Publicly available transit infrastructure data were reviewed from the San Diego Geographic Information Source database, and no public transit infrastructure (e.g., transit routes, stops, or rail) exists within 0.5 mile of the proposed 230 kV transmission line and existing Suncrest Substation. However, as previously mentioned, multiple transit routes occur along East Main Street adjacent to the proposed Hospital Yard. Additionally, 16 transit stops exist within 0.5 mile of the proposed Hospital Yard. Figure 3.18-2: Regional Rail and Transit Infrastructure illustrates the rail and transit infrastructure within the vicinity of the Proposed Project Area.

3.18.1.4 Bicycle and Pedestrian System

The County of San Diego's (County's) Active Transportation Plan (ATP) is a multi-objective plan that identifies goals, objectives, and actions related to improving safety for cyclists and pedestrians and increasing accessibility to the active transportation network. The ATP recommends upgrading Class IV cycle tracks or installing buffered Class II bike lanes on all light collector and community collector roads, as well as Class IV cycle tracks on all major roads (County of San Diego 2018a). One Class II bike lane occurs within the vicinity of the proposed

230 kV western UG segment along Greenfield Drive, and no bike lanes occur along the proposed 230 kV transmission line alignment. The Class II bike lane on Greenfield Drive runs adjacent to the northern border of the proposed Hospital Yard. The City's Bicycle Master Plan proposes approximately 52 miles of bikeway facilities, bringing the City's total to 72.5 miles (City of El Cajon 2011). No additional bike lanes have been identified or recommended by the County or City within the Proposed Project Area.

No sidewalks exist within the vicinity of the proposed 230 kV transmission line and the existing Suncrest Substation. However, sidewalks exist on both East Main Street and Greenfield Drive, bordering the proposed Hospital Yard.

3.18.1.5 Vehicle Miles Traveled

In accordance with Senate Bill (SB) 743 (Steinberg 2013), California Environmental Quality Act (CEQA) Guidelines Section 15064.3(b) was adopted in 2018 and established VMT as the criteria for determining the significance of transportation-related impacts. VMT is a measure of the total number of miles driven to or from a development, sometimes expressed as an average per trip or per person. Table 3.18-2: Average Daily Vehicles Miles Traveled (DVMT) (1,000) in 2023 presents a summary of the average daily VMT per person in 2023 in the City and unincorporated San Diego County.

Table 3.18-2: Average Daily Vehicles Miles Traveled (DVMT) (1,000)[3] in 2023[4]

Jurisdiction	Rural	Urbanized	Total
City of El Cajon	Not Applicable	846.64	846.64
County of San Diego	1,610.85	3,008.33	4,619.17

Source: Caltrans 2023b

3.18.2 Regulatory Setting

3.18.2.1 Federal

3.18.2.1.1 Southern California National Forests Land Management Plan

The following verbatim design criteria concerning transportation corridors on forests and grasslands is derived from Part 2: Cleveland National Forest Strategy of the Southern California National Forests Land Management Plan (United States Forest Service 2005):

- **S3:** Off-highway vehicle use is limited to designated routes and areas.
- **S4:** Motorized use of Forest Service system roads is limited to state licensed operators only unless the road is designated for use by non-licensed operators.
- **S5:** Consolidating major transportation and utility corridors by co-locating facilities and/or expanding existing corridors.

[3] The DVMT for the City of El Cajon and County of San Diego are the numbers presented in Table 3.18-2 x1,000. These numbers are estimates provided in the Caltrans 2023 Public Road Data report.
[4] Data presented in this table are the latest data available as of July 2025.

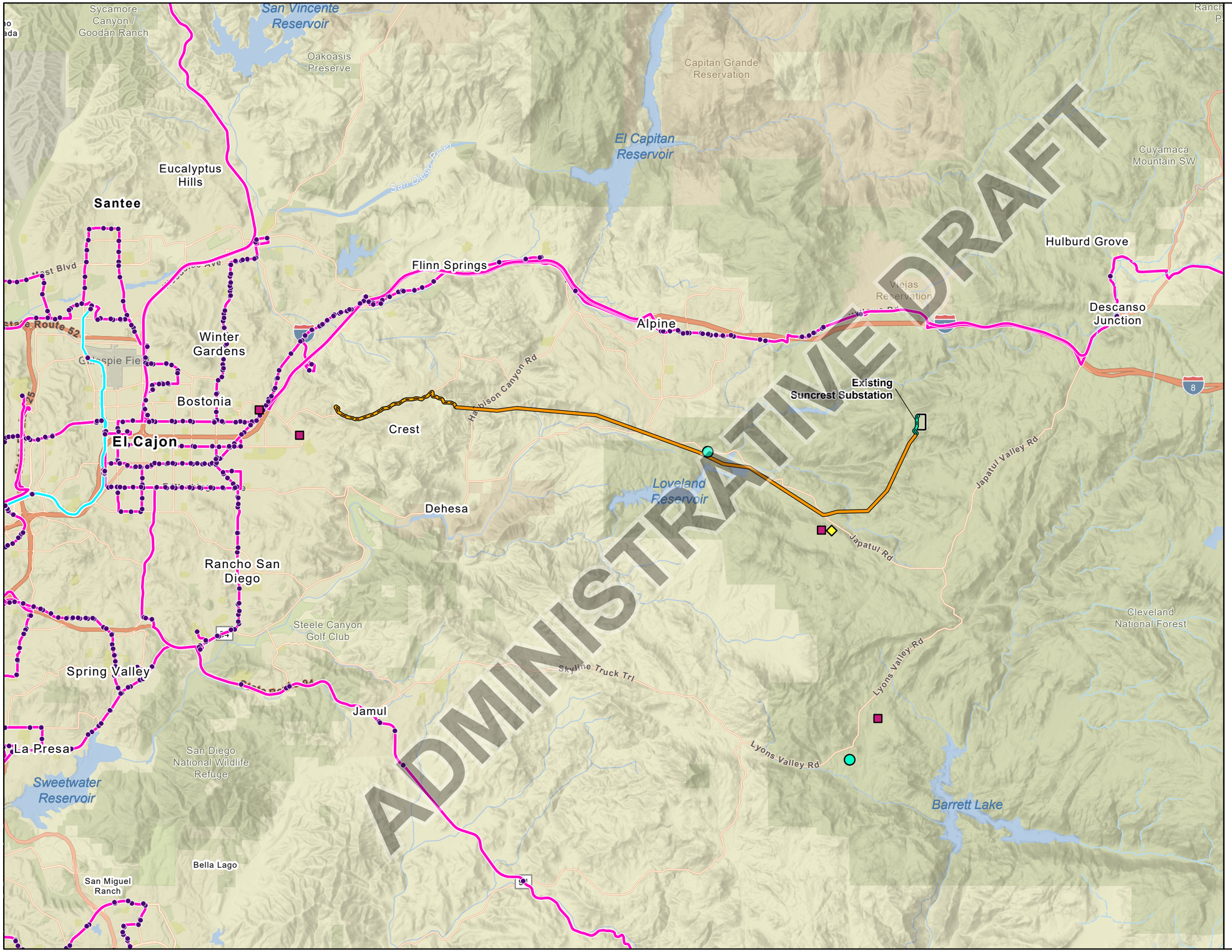
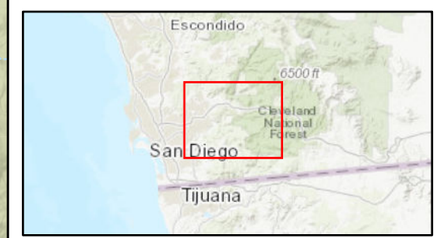


Figure 3.18-2:
Regional Rail and Transit Infrastructure

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Transit Stop
- Transit Route
- Rail



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Additionally, the following verbatim strategies concerning transportation on forest and grasslands are derived from Appendix B of Part 2: Cleveland National Forest Strategy:

- **Trans 1: Transportation System.** Plan, design, construct, and maintain the road and trail system to meet those objectives established to implement the forest plan, to promote sustainable resource conditions, and to safely accommodate anticipated levels and types of use.

- **Trans 2: Unnecessary Roads.** Reduce the number of unnecessary or redundant unclassified roads and trails and restore landscapes.

- **Trans 3: Improve Trails.** Develop an interconnected, shared-use trail network where compatible and support facilities complement local, regional and national trails and open space, and also enhance day-use opportunities and access for the general public.

- **Trans 4: Off-Highway Vehicle Opportunities.** Provide off-highway vehicle opportunities on designated routes within the Wildomar and Coral Canyon OHV areas, and on existing designated routes.

3.18.2.1.2 Code of Federal Regulations

Title 49, Subtitle B of the Code of Federal Regulations (CFR) includes procedures and regulations governing interstate and intrastate transportation (e.g., hazardous materials program procedures). Title 49, Subtitle B provides safety measures for motor carriers and motor vehicles that operate on public highways.

3.18.2.1.3 Hazardous Materials Transportation Act of 1974

The U.S. Department of Transportation (DOT) has the regulatory responsibility for the safe transportation of hazardous materials under the Hazardous Materials Transportation Act (HMTA). The HMTA authorizes the Secretary of Transportation to designate a commodity as a hazardous material if the transportation of a commodity of a particular quantity and form poses an unreasonable risk to the health and safety or property of the public. The regulations identifying various commodities as hazardous materials and specifying the requirements for their transport are codified in Title 49, Parts 100 to 185 of the CFR (U.S. DOT 2023).

3.18.2.2 State

3.18.2.2.1 California Vehicle Code

Caltrans manages the state highway system and is responsible for protecting the traveling public and highway infrastructure. The California Highway Patrol is the administering agency for regulations related to traffic safety, the transportation of hazardous and combustible materials, and the safe operation of vehicles (California Vehicle Code [CVC] 2025a, 2025b). The Department of Motor Vehicles is the agency responsible for the licensing of drivers (CVC 2025c). The CVC includes regulations pertaining to the licensing, size, weight, and load of vehicles operated on highways; the safe operation of vehicles; and the transportation of hazardous materials. Caltrans requires transportation permits for the movement of vehicles or

loads that exceed the limitations on size and weight specified in Division 15, Chapter 5, Article 1, Section 35551 of the California Vehicle Code.

3.18.2.2.2 California Streets and Highways Code

Section 660 of the California Streets and Highways Code includes regulations for the care and protection of state and county highways. Section 660 requires permits for any load that exceeds Caltrans's weight, length, or width standards for public roadways. Sections 700 through 711 contain provisions specific to utility providers. Additionally, the California Streets and Highways Code outlines directions for cooperation with local agencies, guidelines for permits, and general provisions relating to state highways and Caltrans's jurisdiction.

Caltrans's Transportation Impact Study Guide (TISG), Transportation Analysis Framework (TAF) and Transportation Analysis under CEQA (TAC) are used by its Local Development-Intergovernmental Review (LD-IGR) program during the environmental review process to ensure compliance with CEQA and other state planning laws. Caltrans's LD-IGR program collaborates with local jurisdictions throughout their planning and decision-making processes. The TISG emphasizes a reduction in VMT by shifting from single-occupancy vehicle trips to increased travel via cycling, walking, carpooling, and transit. Caltrans's primary focus is on reviewing a project's impact on VMT. Caltrans recommends using the Governor's Office of Planning and Research's (OPR) December 2018 SB 7 recommended thresholds for land use projects. However, as each lead agency develops and adopts its own VMT thresholds for land use projects, Caltrans will review these thresholds as set by the lead agency, through policy, resolution, or ordinance (Caltrans 2020).

3.18.2.2.3 California Transportation Commission

The California Transportation Commission (CTC) was established in 1978 in response to a growing desire for a single, unified California transportation policy. The CTC is responsible for programming and allocating funds for the construction of highways, passenger rail, active transportation, aeronautics, and transit improvements throughout California. The CTC advises and assists the Secretary of the California State Transportation Agency and the state legislature in formulating and evaluating state policies and plans for California's transportation programs. The CTC is also an active participant in the initiation and development of state and federal legislation aimed at securing financial stability for the state's transportation needs.

3.18.2.2.4 California Joint Utility Traffic Control Manual

The California Joint Utility Traffic Control Manual provides guidelines for ensuring that the needs of all road users (e.g., motorists, bicyclists, and pedestrians) are met through the establishment of a temporary traffic control zone during highway construction, utility work, and maintenance operations. For any construction activities within a local public ROW, the use of a traffic control service and any lane closures must be conducted in accordance with applicable laws and permit conditions. These traffic control measures are consistent with those published in the California Joint Utility Traffic Control Manual.

3.18.2.3 Local

3.18.2.3.1 County of San Diego

San Diego County General Plan

The following verbatim policies that are relevant to transportation and the Proposed Project are derived from the San Diego County General Plan (County of San Diego 2011a):

- **Policy M-2.1: Level of Service Criteria.** Require development projects to provide associated road improvements necessary to achieve a level of service of "D" or higher on all Mobility Element roads except for those where a failing level of service has been accepted by the County pursuant to the criteria specifically identified in the accompanying text box (Criteria for Accepting a Road Classification with Level of Service E/F). When development is proposed on roads where a failing level of service has been accepted, require feasible mitigation in the form of road improvements or a fair share contribution to a road improvement program, consistent with the Mobility Element road network.

- **Policy M-2.2: Access to Mobility Element Designated Roads.** Minimize direct access points to Mobility Element roads from driveways and other non-through roads to maintain the capacity and improve traffic operations.

- **Policy M-3.1: Public Roads Rights-of-Way.** Require development to dedicate right-of-way for public roads and other transportation routes identified in the Mobility Element roadway network (see Mobility Element Network Appendix), Community Plans, or Road Master Plans. Require the provision of sufficient right-of-way width, as specified in the County Public Road Standards, Active Transportation Plan, and Community Trails Master Plan, to adequately accommodate all users, including transit riders, pedestrians, bicyclists, and equestrians.

- **Policy M-3.2: Traffic Impact Mitigation.** Require development to contribute its fair share toward financing transportation facilities, including mitigating the associated direct and cumulative traffic impacts caused by their project on both the local and regional road networks. Transportation facilities include road networks and related transit, pedestrian and bicycle facilities, and equestrian.

- **Policy M-3.3: Multiple Ingress and Egress.** Require development to provide multiple ingress/egress routes in conformance with State law and local regulations.

- **Policy M-8.5: Improved Transit Facilities.** Require development projects, when appropriate, to improve existing nearby transit and/or park and ride facilities, including the provision of bicycle and pedestrian facilities, provisions for bus transit in coordination with NCTD and MTS as appropriate including, but not limited to, shelters, benches, boarding pads, and/or trash cans, and to provide safe, convenient, and attractive pedestrian connections.

- **Policy M-11.2: Bicycle and Pedestrian Facilities in Development.** Require development and Town Center plans in Villages and Rural Villages to incorporate site

design and on-site amenities for alternate modes of transportation, such as comprehensive bicycle and pedestrian networks and facilities, including both on-street facilities as well as off-street bikeways, to safely serve the full range of intended users, along with areas for transit facilities, where appropriate and coordinated with the transit service provider.

- **Policy S-2.7: Evacuation Access.** All development proposals are required to identify evacuation routes at the Community Plan level and identify and facilitate the establishment of new routes needed to ensure effective evacuation. Evacuation routes should be incorporated into existing Community Wildfire Protection Plans where available.

Alpine Community Plan

The following verbatim goals and policies that are relevant to transportation and the Proposed Project are derived from the Draft Alpine Community Plan (County of San Diego 2020b):

- **Goal M-1.** Support a multi-modal transportation system that serves the general convenience and safety of Alpine citizens and enhances the beauty and quality of the built environment

- **Policy M-1.3.** Encourage traffic calming along the following:

    1. Willows Road between the Viejas Reservation and the west Willows Road I-8 on/off ramps
    2. South Grade Road
    3. Arnold Way
    4. Tavern Road between Alpine Boulevard and
    5. South Grade Road
    6. Alpine Boulevard between Tavern Road and the west Willows Road I-8 on/off ramps, and
    7. Existing and future school sites.

- **Policy M-1.7.** Support the improvement of circulation access from Harbison Canyon Road to Alpine Boulevard and I-8 via Arnold Way.

- **Policy M-1.8**. Design roads in industrial areas so industrial traffic will not use nearby residential streets for access or circulation.

Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan

The following verbatim goals and policies that are relevant to transportation and the Proposed Project are derived from the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan (County of San Diego 2011b):

- **Goal CM 3.1.** A circulation system that provides for the special and urgent needs for emergency access to and from all areas of the community and that provides proper ingress and egress for residents and emergency vehicles at all times.

- **Goal CM 4.1.** A public transportation system that serves residents of the Subregion in an efficient and effective manner.

- **Goal CM 5.1.** A network of safe community pedestrian pathways that connect residential areas with schools, churches, parks, and commercial areas.

- **Policy 5.1.1.** Require development to provide safe community pathways along roads that lead to and from schools, parks, churches, and commercially-zoned areas, whenever appropriate.

- **Goal CM 6.1.** A well-connected and maintained bicycle and trail network serving the mobility and recreations needs of the Subregion.

- **Policy CM 6.1.1.** Trail easements are identified for non-motorized mountain bicycle, pedestrian, and equestrian use. Pathways within road right-of-ways are identified for pedestrian and equestrian use. Establish Subregion-specific criteria for providing a trail network of varying easement width requirements depending on topography and land use, based on the following criteria require a:

    1. 20-foot wide easement where proposed trails would cross steep and rugged terrain to allow the trail to meander or switch back and forth in order to maintain acceptable grade, and where proposed between residential lots to provide ample room in the event lots are fenced at the trail right-of-way.

    2. 10-foot easement Where trails are located adjacent to roads, unless when combined with a 5-foot or 10-foot wide portion (side path) of the road right-of-way, a 5-foot wide easement will suffice.

- **Policy CM 6.1.2.** Require the provision of a bike lane within the shoulder of all public roads, unless the shoulder will be used for parking. In those situations, provide a separate bike lane between the travel lanes and parking, whenever sufficient right-of-way is available.

County of San Diego Code of Regulatory Ordinances Title 71, Division 1

Chapter 6: Encroachments in Division 1: Protection of Highways, Section 71.602 of the County's Code of Regulatory Ordinances states "no personal shall place, change, or renew and encroachment in, under or over any portion of a highway, pathway or trail, without first obtaining from the Director a written permit" (County of San Diego 1994). The encroachment permit application must include the location, description, and justification for the encroachment, as well as the duration of the permit requested and any other information the Director may require. For this Division, "highway" means any public highway, public street, public way, or public place in the unincorporated areas of the county; and "Director" refers to the Director of the Department of Public Works (County of San Diego 2020a).

County of San Diego Transportation Study Guidelines

The County of San Diego's Transportation Study Guidelines document was adopted in response to SB 742 and outlines requirements for the preparation of a detailed VMT analysis. The document lists VMT thresholds of significance by land use type and procedures for VMT analysis (County of San Diego 2022).

County of San Diego Active Transportation Plan

The County of San Diego ATP, established in October 2018, outlines a comprehensive approach to enhanced walking, biking, and other non-motorized travel throughout San Diego County's unincorporated areas. The ATP focuses on improving safety, accessibility, and connectivity while supporting public health and reducing greenhouse gas (GHG) emissions. Additionally, the ATP addresses the region's limited pedestrian and cycling infrastructure, particularly in rural and suburban communities. Furthermore, the ATP proposes an expanded network of sidewalks, pathways, and bikeways, including over 700 miles of recommended Class II bike lanes and Class IV separated bikeways. These facilities are designed to connect residents to schools, parks, and commercial areas while encouraging a shift away from car dependency.

The ATP aligns with the County's General Plan, Climate Action Plan, and health-focused Live Well San Diego initiative. The ATP also supports state goals such as tripling bicycle use and doubling walking rates. Through programs such as the California Active Transportation Program and SANDAG grants, the ATP enhances the County's competitiveness for transportation funding. The ATP was shaped through public engagement, assessments of existing conditions, and coordination with neighboring jurisdictions. Implementation will occur through capital improvement projects and private development requirements, ultimately creating a safer, more equitable, and environmentally sustainable transportation network (County of San Diego 2018a).

County of San Diego Bicycle Transportation Plan

The County's Bicycle Transportation Plan aims to guide the development and maintenance of a bicycle network for the unincorporated areas of San Diego County. The plan acknowledges the importance of a safe, effective, and interactive bikeway network in enhancing the quality of life for residents and visitors to the county. The policies outlined in the plan address important issues related to the county's bikeways, and the priorities and recommendations outlined ensure the plans success (County of San Diego 2003).

County of San Diego Alpine Evacuation and Protection Plan

The County's Alpine Evacuation and Protection Plan was published in 2006 and outlines various community protection and evacuation plans, mitigation strategies, response plans, and emergency services for the unincorporated community of Alpine. The Alpine Evacuation and Protection Plan details the following information that applies to the Proposed Project:

- mitigation strategies;
- community protection and evacuation plans;
- response plans and resources for fire agencies, law enforcement, animal services, mass casualty, and medical, and emergency services; and
- shelters and fire safe zones.

3.18.2.3.2 San Diego Association of Governments

2021 Regional Plan

The 2021 Regional Plan by SANDAG outlines a long-term strategy to create a fast, fair, and clean transportation system for the San Diego region. The plan addresses major challenges (e.g., congestion, climate change, and social inequities) through a coordinated approach that integrates land use and transportation planning. Transit leap, complete corridors, mobility hubs, flexible fleets, and Next Operating System technology are the main points of emphasis that anchor this plan. With these anchors, the plan aims to implement on-demand mobility, expanded transit options, smart infrastructure, and sustainability. It prioritizes equitable access to affordable transportation, reduces GHG emissions, and prepares the region for projected population and job growth through 2050. The plan also integrates technology, promotes zero-emission vehicles, and supports safer, more inclusive communities (SANDAG 2021).

Regional Bicycle Plan

The SANDAG Regional Bicycle Plan outlines a long-term vision for a connected network of bike corridors, facilities, and programs designed to make bicycling a more practical and appealing option for more people. As the plan looks ahead to 2050, it supports a bike-friendly region as a solution to major challenges, including traffic congestion, pollution, climate change, and public health issues. It promotes the development of complete streets, increased bicycle use, and greater safety and awareness. The plan includes recommendations for expanding bike infrastructure, launching supportive programs, and adopting policies and design standards to help meet these goals and improve quality of life throughout the San Diego region (SANDAG 2010).

3.18.2.3.3 City of El Cajon

City of El Cajon General Plan

The following verbatim goals and policies that are relevant to transportation and the Proposed Project are derived from the City of El Cajon General Plan (City of El Cajon 2001):

- **Goal 6.** To create a circulation system including all modes of transportation organized to ensure the safe, efficient movement of people and goods.

- **Policy 6-7.1.** The planning, development and operation of the various elements in the transportation system (road, rail, mass transit, bicycle facilities, etc.) shall be coordinated to recognize interrelationships both between one element and another, and between each element and land uses they serve or affect.

- **Policy 6-7.3.** Pedestrian and bicycle routes separated from auto traffic should be provided wherever possible. It is particularly desirable that adequate provision be made for pedestrian or bicycle movement at freeway grade separations and interchanges affecting the local street system. Bicycle and pedestrian facilities should be considered as alternative modes of transportation, not just recreational features. The City should take positive action in this area.

- **Policy 6-7.5.** The City should support efforts to provide for a regional transportation system in the county. Also, El Cajon should work toward being served by that regional system and should continue efforts to provide supplemental transportation facilities.

- **Policy 6-8.1.** Efforts to encourage the use of public transit should be implemented such as cross-town transit, use of shuttle buses, car pooling, Transportation Demand Management Systems and other methods to reduce auto traffic.

City of El Cajon Encroachment Permit

The City's encroachment permit application includes provisions for any activity in streets, parkways, sidewalks, and easements within the public ROW (City of El Cajon 2025a). While the City requires insurance for permits issued for work in the ROW, public utilities are exempt from this requirement (City of El Cajon 2025b).

City of El Cajon Bicycle Master Plan

The City of El Cajon's 2011 Bicycle Master Plan provides a strategic framework to strengthen connections between mass transit, employment centers, residential areas, and activity hubs through bikeways. Its goal is to encourage alternatives to automobile travel while creating a more convenient bikeway system for cyclists without access to motor vehicles. The plan proposes approximately 52 miles of bikeway facilities, bringing the City's total to 72.5 miles. The plan identifies priority bike lanes and routes, and recommends improved parking, signage, and signal detection. Additionally, it supports education, enforcement, encouragement, and evaluation programs. Implementation is supported by cost estimates and funding sources (City of El Cajon 2011).

3.18.3 Impact Analysis and Mitigation Measures

3.18.3.1 Analysis Methodology

Evaluation of potential impacts on transportation services was based on a review of local, state, and federal documents, as well as a desktop review of the Proposed Project Area. Impacts on transportation services resulting from the implementation of the Proposed Project were identified by comparing the baseline transportation network, facilities, and services to future demand and potential disruptions in service.

3.18.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to transportation or transportation services.

3.18.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For transportation, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

- Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Result in inadequate emergency access?

3.18.3.4 Impact Analysis

3.18.3.4.1 Impact TRA-01: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Construction

Less-than-Significant Impact with Mitigation. Proposed Project-related traffic in San Diego County would occur during the approximately 5-year-long construction period. I-8 would serve as the regional route for construction vehicles and workers traveling to and from the proposed staging yards at the beginning and end of each workday. Table 3.18-1: Public Access Roadways lists access roads that are expected to be utilized to access the Proposed Project work areas and the existing Suncrest Substation. Construction of the Proposed Project and modifications to the existing Suncrest Substation would temporarily increase the number of vehicles on these roadways. Although some disruption to traffic flow would occur with ingress or egress from access roads/routes, such events would be periodic and temporary. Additionally, advance notice would be provided to property owners 30 days before the start of construction. The notification letters would contain pertinent Proposed Project information and a schedule of construction activities.

SANDAG does not have existing models available for estimating VMT generated by the Proposed Project. Furthermore, VMT generated by the construction of the Proposed Project would represent a small percentage of average daily VMT in the City of El Cajon and San Diego County, and quantitative modeling is unnecessary to evaluate traffic impacts. Therefore, this section analyzes VMT and transportation impacts qualitatively.

Trips associated with daily construction personnel traffic are not expected to disrupt the traffic flow along I-8 or the local roads that would be used for construction access to the proposed 230 kV transmission line or the existing Suncrest Substation. Most construction workers would be reverse commuting and traveling away from metropolitan areas toward the rural Proposed Project Area, then returning in the evening. Personal vehicles would be parked within the proposed staging yards and therefore would not encroach upon public roadways. As previously discussed in Section 3.18.1.3 Public Transit System and Section 3.18.1.4 Bicycle and Pedestrian System, a Class II bike lane, sidewalks, and both Route 864 El Cajon Transit Center – East County Square and Route 888 Jacumba Hot Springs – El Cajon exist adjacent to the proposed Hospital Yard. Additionally, 16 transit stops exist within 0.5 mile of the proposed Hospital Yard. However, the number of vehicles on Greenfield Drive and East Main Street would only temporarily increase as a result of the proposed Hospital Yard, and disruption to alternative modes of transportation (e.g., rail, bus, or bicycle traffic) would not be substantial. The number of vehicles on East Main Street and Greenfield Drive would increase by approximately 318 vehicles during peak construction, which would represent a negligible increase in the AADT values presented in Table 3.18-1: Public Access Roadways. Except for the proposed Hospital Yard, no alternative modes of transportation or pedestrian circulation patterns would be altered

or adversely affected by the construction of the Proposed Project because none are located in the Proposed Project Area. Additionally, the Proposed Project would not be located within 0.5 mile of a major transit stop or high-quality transit corridor; thus, public transit would likely be unaffected by construction-related traffic.

Construction of the proposed 230 kV western UG segment would likely require closure of one lane of traffic during daytime hours for an extended period, which could cause traffic delays if detours are not available. Additionally, wire-stringing activities associated with construction of the proposed 230 kV OH segment would require brief lane, partial closures, which are anticipated to occur for only 100 to 200 feet at a time and would likely have "reversing" traffic flows to minimize impacts to the public. However, SDG&E would obtain an encroachment permit and traffic control permit from the County, which would include conditions (e.g., work site traffic control plans [TCPs]) that would minimize traffic delays. The relevant permits would also specify the duration of lane closures as necessary. In accordance with Mitigation Measure (MM) TRA-01, TCPs for the Proposed Project would implement protective measures, including lighting, flaggers, traffic control cones, electronic signage, fixed roadway warning signs, and any other measures required by the Director of the County's Department of Public Works to protect the traveling public. The proposed Hospital Yard would be located on the corner of Greenfield Drive and East Main Street in El Cajon and would temporarily increase the flow of traffic on these roads. Greenfield Drive is a FHWA-classified major collector, and East Main Street is a FHWA-classified minor arterial. Additionally, the proposed Greenfield Yard would be located on Greenfield Drive in unincorporated San Diego County and would also temporarily increase traffic congestion on Greenfield Drive. However, as previously mentioned, most construction workers would be reverse commuting, and personal vehicles would be parked within the proposed staging yards. Additionally, as previously mentioned, advance notice would be provided to property owners 30 days before the start of construction.

As discussed in Section 3.21 Wildfire, the Safety Element of the County General Plan identifies potential evacuation routes throughout the county. La Cresta Road, Mountain View Road, Harbison Canyon Road, Dehesa Road, Tavern Road, and Japatul Road are all identified as potential evacuation routes, and all of these roads would likely require brief, partial lane closures during construction of the proposed 230 kV western UG segment and proposed 230 kV OH segment. Additionally, La Cresta Road and Mountain View Road are identified as the "main evacuation routes" for the community of Crest in the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. Furthermore, construction of the proposed 230 kV western UG segment would cross approximately 36 driveways along La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive. The County's Alpine Evacuation and Protection Plan does not identify any specific evacuation routes. Lane closures would be partial and temporary; and in the event of an emergency, two-way traffic would return to allow for evacuation. Additionally, for each road identified as an evacuation route that would potentially experience a brief lane closure due to construction of the Proposed Project, there are alternative evacuation routes that could be utilized for ingress and egress. Furthermore, with the implementation of MM TRA-01, emergency service providers would be provided notice before the commencement of construction activities that would require lane closures. Therefore, the Proposed Project would not conflict with any program, plan, ordinance, or policy addressing the circulation system. As a result, impacts would be less than significant with mitigation.

The following MM is prescribed:

- **MM TRA-01: Traffic Control Plan and Safe Transport.** SDG&E would prepare a TCP for approval by the County for the Project Area prior to any construction activities requiring heavy vehicle and equipment traffic on public roadways or full or partial closure of public streets. The TCP must be approved by the County prior to construction in areas that require encroachment permits, with the approval process expected to occur through issuance of encroachment and traffic control permits. The TCP would establish methods for minimizing construction effects on roadways; and address staging areas, haul routes, types of equipment anticipated to be used, timing of heavy equipment and material deliveries, worker and equipment parking, potential street or lane closures, alternative routes and detours, signing, lighting, and traffic control device placement to minimize disruption and maintain safe and efficient traffic flow. The TCP would include measures for directing delivery and haul trucks away from sensitive receptor locations (e.g., residential neighborhoods and schools) and congested intersections during construction. The TCP would also establish the timing and method for notifying emergency service providers regarding Project activities and notifying the public (e.g., wayfinding signage) regarding full or partial closure of public streets, detours, and alternative routes.

Operations and Maintenance

Less-than-Significant Impact. The Proposed Project would result in a negligible number of additional vehicle trips during operation, as the facilities would continue to be unmanned during operations and monitored remotely. Regular inspections of the existing Suncrest Substation and access roads would continue following the completion of the Proposed Project construction. These include quarterly inspections, which are performed to inspect equipment in accordance with the manufacturer's recommendations. Maintenance programs would continue for existing facilities and would be implemented for proposed facilities by SDG&E maintenance personnel or qualified contractors. In the event of an emergency (e.g., environmental conditions, vandalism, or accidents), emergency repair operations would involve deployment of SDG&E maintenance personnel or qualified contractors as necessary to repair and/or replace damaged facilities. No alternative modes of transportation (e.g., rail, bus, or bicycle traffic) or pedestrian circulation pattern would be altered or adversely affected by O&M of the Proposed Project because none are present in the Proposed Project Area.

Dewatering of utility vaults along the proposed 230 kV western UG segment would require brief, partial lane closures in areas where vaults are installed within roadways. These partial lane closures would occur within Al Bahr Road and Canyon Rim Drive; however, neither of these roads are identified as a potential evacuation route by the County. As a result, impacts would be less than significant.

3.18.3.4.2 Impact TRA-02: Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Construction

Less-than-Significant Impact. CEQA Guidelines Section 15064.3, Determining the Significance of Transportation Impacts, was introduced to provide guidance for determining the

significance of transportation impacts. Section 15064.3 provides criteria for determining a project's transportation impacts, including for land use projects (Section 15064.3[b][1]) and transportation projects (Section 15064.3[b][2]). In accordance with Criteria 3 and Criteria 4 of CEQA Guidelines Section 15064.3, VMT data were calculated for the construction of the Proposed Project to provide a comparison to available VMT data within and surrounding the Proposed Project.

Approximately 159 construction personnel are expected to work each day during peak employment, generating approximately 177 round trips per day[5] during the peak construction phase of the Proposed Project.

The average VMTs for San Diego County and the City are provided in Table 3.18-2: Average Daily Vehicles Miles Traveled (DVMT) (1,000) in 2023. Given the rural nature of much of the Proposed Project, the VMT for construction would be comparable to other rural uses in the county. The estimated total daily average VMT of approximately 5,975.8 during construction would last approximately 44 months. The VMT that would be generated by the Proposed Project during construction is summarized in Table 3.18-3: Estimated Construction Vehicle Trips and Vehicle Miles Traveled. VMT from construction workers during construction of the Proposed Project would not represent newly generated traffic caused by construction of the Proposed Project, but rather a redistribution across the regional roadway network as workers travel to various worksites each day. Depending on the location of construction workers' housing and work areas, redistributed VMT could increase or decrease. It is possible that VMT in San Diego County and the City of El Cajon could increase due to the construction of the Proposed Project; however, even if this occurs, the increase would be periodic and temporary. Therefore, impacts would be less than significant.

Table 3.18-3: Estimated Construction Vehicle Trips and Vehicle Miles Traveled

Proposed Project Component	Average One-Way Trips	Maximum One-Way Trips	Average VMT	Maximum VMT
Existing Suncrest Substation	67.1	102	2,404.3	3,530
Proposed 230 kV UG Segments	19.4	92	658.9	3,090
Proposed 230 kV OH Segment	46.7	284	1,677.3	10,220
Miscellaneous[6]	36.9	92	1,235.4	3,120

Note: This table is preliminary and subject to change based on CPUC requirements, final engineering, and other factors.

Operations and Maintenance

Less-than-Significant Impact. Construction of the Proposed Project would generate vehicle trips predominantly during construction activities and would not result in any long-term increase in VMT. Once construction is complete, the existing Suncrest Substation would remain unstaffed

[5] Peak round trips per day are higher than peak construction personnel due to hauling and vendor trips, which result in additional round trips for Proposed Project construction without increasing construction personnel numbers.

[6] Includes the following activities: surveying and staking; utility locating; mobilization; commissioning and testing; and site and ROW restoration.

and continue to be monitored remotely. Quantitative analysis of VMT resulting from O&M of the Proposed Project is not available, as no such models or methods exist for unoccupied structures. Routine maintenance of the proposed 230 kV transmission line is expected to require approximately one trip per year by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. Additionally, annual comprehensive checks and maintenance would be performed by SDG&E maintenance personnel or qualified contractors. Should structures require direct access during maintenance, overland access would be utilized consistent with easement access rights and in coordination with the landowner. The VMT that would occur annually during O&M activities would be negligible. As a result, impacts would be less than significant.

3.18.3.4.3 Impact TRA-03: Would the project substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction

Less-than-Significant Impact. The Proposed Project would involve the construction of 20 underground utility vaults within Vista De Montemar, La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive. However, the vaults would be flush with the ground surface and would not substantially increase hazards. No other Proposed Project components would be built in roads or road shoulders, and no alteration of existing roads would occur. No transmission poles or riser structures would be installed in public roads or road shoulders as part of the construction of the proposed 230 kV OH segment, as the proposed pole and riser structure locations are all located away from public roadways and in overland areas. Trucks or helicopters would be used for pole installation and aboveground conductor installation activities. If a truck is used for these activities, its use would occur off SDG&E access roads in overland areas and therefore would not create any roadway hazards. Temporary overhead guard structures would be installed at transportation crossings before conductor installation to prevent line drops on existing power lines, roadways, and other features that need protection during construction. These structures would be designed to stop the movement of the conductor should it drop below the anticipated stringing height during installation and removal. However, these structures would be temporary and would only be present at eight locations across the alignment where the proposed 230 kV transmission line would cross paved roads.

The construction of access roads and improvements to unpaved roads would not include any design features that would substantially increase traffic hazards, such as sharp curves or dangerous intersections. All access roads would be in a rural area and would be limited to use by construction personnel only. Construction activities would be compatible with the intended use of the existing roadways and would not utilize any equipment that would increase hazards to the existing roadways.

In accordance with MM TRA-01, encroachment permits and traffic control permits from the County would be secured as required, and corresponding TCPs would be prepared, approved by the County, and implemented before any lane closures. Before construction, appropriate traffic control measures would be implemented adjacent to egress and ingress locations at each work area within roadways, including lighting, flaggers, traffic control cones, electronic signage, and fixed roadway warning signs. Long-term road closures are not anticipated; however, one-way

traffic controls and short-term[7] lane closures would be implemented to facilitate specific construction activities (e.g., construction of the proposed 230 kV western UG segment) and to verify public safety. As a result, impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. The Proposed Project would not have incompatible uses or design features that would substantially increase hazards. The proposed 230 kV transmission line would be unstaffed and remotely monitored during operation, and the existing Suncrest Substation would also remain unstaffed and remotely monitored. As previously stated, typical O&M activities would primarily involve routine inspections, preventative maintenance, and repair of existing facilities. However, dewatering of utility vaults would require brief, partial lane closures in areas where vaults are installed within roadways. These lane closures would occur within Al Bahr Road and Canyon Rim Drive; however, with the implementation of MM TRA-01, impacts would be less than significant.

3.18.3.4.4 Impact TRA-04: Would the project result in inadequate emergency access?

Construction

Less-than-Significant Impact. The construction of the Proposed Project would not impair the implementation of or physically interfere with an adopted emergency response or evacuation plan. Temporary lane closures would be required during the construction of the facilities; however, in accordance with MM TRA-01, these closures would be coordinated with the County and emergency service providers through the encroachment permit and traffic control permit processes; and one or more TCPs would be implemented as necessary. These plans would confirm that emergency services are aware of any temporary lane closures and would establish protocols for cases where emergency access is required along roadways with lane closures.

As previously stated, the Safety Element of the County General Plan identifies several potential evacuation routes with the potential to be affected by brief, partial lane closures associated with construction of the proposed 230 kV western UG segment and proposed 230 kV OH segment. These evacuation routes include roads such as La Cresta Road, Mountain View Road, Harbison Canyon Road, Dehesa Road, Tavern Road, and Japatul Road. Additionally, La Cresta Road and Mountain view road are identified as the "main evacuation routes" for the community of Crest in the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. However, in the event of an emergency, two-way traffic would return to allow for evacuation and emergency vehicle access. Additionally, the previously mentioned roads all have a secondary point of access or exit. As a result, impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. The Proposed Project would result in a nominal increase in O&M activities in the area, as the proposed 230 kV transmission line and existing Suncrest Substation would be monitored remotely during operation. Routine maintenance would require

[7] Lane closures would likely only occur for 40 to 500 feet at a time or as specified in encroachment permits; and they would be returned to two-way traffic at the end of each workday.

approximately one trip per year, with activities primarily occurring within existing and proposed access roads. Occasional dewatering of utility vaults along the proposed 230 kV western UG segment would require brief, partial lane closures in areas where vaults are installed within roadways. The frequency of dewatering would be commensurate with the rainfall on any given year, but is anticipated to be required less than once per year. As previously stated, these partial lane closures would occur within Al Bahr Road and Canyon Rim Drive; however, closures would be temporary. Additionally, in accordance with MM TRA-01, these closures would be coordinated with the County and emergency service providers through the encroachment permit and traffic control processes; and one or more TCPs would be implemented as necessary. Furthermore, neither of these roads are identified as a potential evacuation route by the County. As a result, impacts would be less than significant.

3.18.4 References

California State Geoportal. 2025. Public Road Functional Classification. Online. https://gis.data.ca.gov/datasets/cf4982ddf16c4c9ca7242364c94c7ad6_0/explore?location=32.931694%2C-117.098755%2C16.16. Site visited June 2025.

Caltrans. 2020. Transportation Impact Study Guide. Online. https://dot.ca.gov/caltrans-near-me/district-4/d4-programs/d4-transplanning-local-assistance/d4-transportation-planning-community-engagement/-/media/f8573ade5689499b8bec8e27b041f397.ashx. Site visited September 2025.

Caltrans. 2023a. Traffic Census Program. Online. https://dot.ca.gov/programs/traffic-operations/census. Site visited November 2025.

Caltrans. 2023b. California Public Road Data. Online. https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/hpms2023-prd-final.pdf. Site visited July 2025.

Caltrans. 2025. Functional Classification. Online. https://dot.ca.gov/programs/research-innovation-system-information/office-of-highway-system-information-performance/functional-classification. Site visited June 2025.

City of El Cajon. 2001. City of El Cajon General Plan. Online. https://www.elcajon.gov/home/showpublisheddocument/140/635497086233100000. Site visited August 2025.

City of El Cajon. 2011. Bicycle Master Plan. Online. https://www.elcajon.gov/home/showpublisheddocument/138/635497083509900000. Site visited August 2025.

City of El Cajon. 2025a. Encroachment Permit. Online. https://www.elcajon.gov/home/showpublisheddocument/25043/638875030085030000. Site visited August 2025.

City of El Cajon. 2025b. Public Right of Way Insurance Requirements. Online. https://www.elcajon.gov/your-government/departments/city-manager/risk-management/public-right-of-way-insurance-requirements. Site visited August 2025

County of San Diego. 1994. Chapter 6: Encroachments. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-82778. Site visited May 2025.

County of San Diego. 2003. Bicycle Transportation Plan. Online. https://www.sandiegocounty.gov/dplu/docs/Bicycle_Transportation_Plan.pdf. Site visited May 2025.

County of San Diego. 2006. Alpine Evacuation and Protection Plan. Online. https://www.sandiegocounty.gov/oes/docs/CPEP_Alpine.pdf. Site visited November 2025.

County of San Diego. 2011a. General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited May 2025.

County of San Diego. 2011b. Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/CREST-CP-11-18-15.pdf. Site visited December 2025.

County of San Diego. 2018a. Active Transportation Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/activetransportationplan/FinalATPOctober2018.pdf. Site visited May 2025.

County of San Diego. 2018b. Mobility Element Network Appendix. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/docs/MobilityNetworkAppendix_2023.pdf. Site visited May 2025.

County of San Diego. 2020a. Section 71.101: Definitions. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-82341. Site visited May 2025.

County of San Diego. 2020b. Draft Alpine Community Plan. Online. sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited December 2025.

County of San Diego. 2022. Transportation Study Guidelines. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/SB743/Transportation%20Study%20Guide%20-%20FINAL%20-%20September%202022.pdf. Site visited May 2025.

CVC. 2025a. Division 2, Chapter 2. Online. https://california.public.law/codes/vehicle_code,_division_2,_chapter_2. Site visited September 2025.

CVC. 2025b. Division 14.8. Online. https://california.public.law/codes/vehicle_code,_division_14.8. Site visited September 2025.

CVC. 2025c. Division 6, Chapter 1, Article 3. Online. https://california.public.law/codes/vehicle_code,_division_6,_chapter_1,_article_3. Site visited September 2025.

FHWA. 2023. Highway Function Classification Concepts, Criteria, and Procedures. Online. https://www.fhwa.dot.gov/planning/processes/statewide/related/hwy-functional-classification-2023.pdf. Site visited May 2025.

Google. Google Earth Pro Version 7.3.6.9345 Software. Program used May 2025.

MTS. 2024. Regional Transit Map. Online. https://www.sdmts.com/sites/default/files/attachments/regional-transit-map.pdf. Site visited May 2025.

OCTA. 2025. LOSSAN Rail Corridor Agency Fact Sheet. Online. https://www.octa.net/pdf/FactSheet_LOSSAN.pdf?n=2025. Site visited September 2025.

SANDAG. 2010. Regional Bicycle Plan. Online. https://www.sandag.org/-/media/SANDAG/Documents/PDF/projects-and-programs/bikeways-and-walkways/regional-bike-plan/san-diego-regional-bike-plan-riding-to-2050.pdf. Site visited May 2025.

SANDAG. 2021. 2021 Regional Plan. Online. https://www.sandag.org/-/media/SANDAG/Documents/PDF/regional-plan/2021-regional-plan/final-2021-regional-plan/final-2021-regional-plan-flipbook.pdf. Site visited May 2025.

SANDAG. 2025a. San Diego Region SB743 VMT Maps. Online. https://www.arcgis.com/apps/webappviewer/index.html?id=bb8f938b625c40cea14c825835519a2b. Site visited May 2025.

SANDAG. 2025b. LOSSAN Corridor Improvements. Online. https://www.sandag.org/projects-and-programs/featured-projects/lossan-corridor-improvements. Site visited September 2025.

SANDAG. 2025c. Roads_All. Online. https://geo.sandag.org/portal/apps/mapviewer/index.html?layers=66ca42638c794646aa85f689a613a5f2. Site visited June 2025.

Steinberg. 2013. Senate Bill No. 743. Online. http://www.leginfo.ca.gov/pub/13-14/bill/sen/sb_0701-0750/sb_743_bill_20130927_chaptered.pdf. Site visited January 2026.

U.S. DOT. 2023. Code of Federal Regulations, Section 49, Chapter I: Transportation. Online. https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I. Site visited May 2025.

USFS. 2005. Land Management Plan Part 2 Cleveland National Forest Strategy. Online. https://www.fs.usda.gov/sites/nfs/files/legacy-media/cleveland/Cleveland%20National%20Forest%20Land%20Management%20Plan.pdf. Site visited September 2025.

ATTACHMENT 3.18-A: LOCAL TRANSPORTATION CIRCULATION

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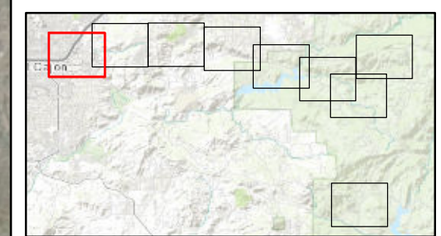
Attachment 3.18-A:
Local Transportation Circulation
Map 1 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- Staging Yard
- Road
- Class 2 Bikeway



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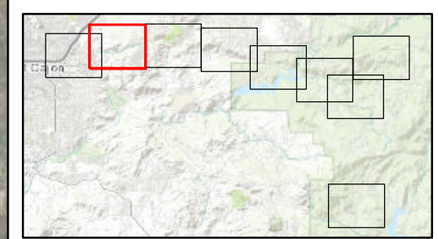
ADMINISTRATIVE DRAFT

Attachment 3.18-A:
Local Transportation Circulation
Map 2 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- Staging Yard
- Road
- Class 2 Bikeway

ADMINISTRATIVE DRAFT



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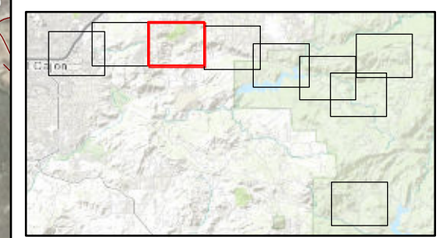
Attachment 3.18-A:
Local Transportation Circulation
Map 3 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment
- Road



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Attachment 3.18-A:
Local Transportation Circulation
Map 4 of 9

Suncrest
230 Kilovolt Loop-In Project

Proposed 230 kV OH Segment
Road

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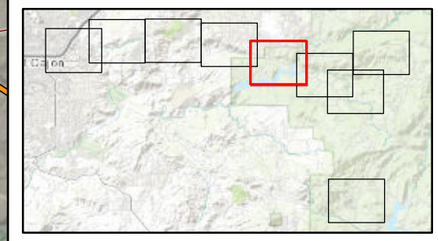
ADMINISTRATIVE DRAFT

Attachment 3.18-A:
Local Transportation Circulation
Map 5 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Staging Yard/Fly Yard
- Road

ADMINISTRATIVE DRAFT



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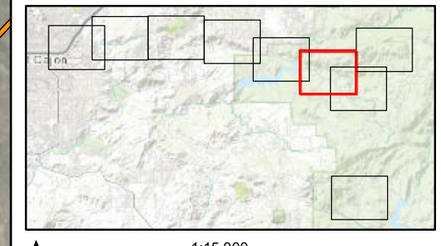
FIREBRAND
FIREBRAND
CONESTOGA
ALEJANDRO
CTE
CTE
VERDE
WAGON
TONGUE
OLD SPUR
GREY MARE
CTE
ROCA
CTE
LOMA
SPANISH BIT
SPANISH BIT
JAPATUL
JAPATUL
ABRAMS RIDGE
HIDDEN GLEN
HIGH GLEN
UNNAMED
MILITARY
GLEN LONELY

ADMINISTRATIVE DRAFT

Attachment 3.18-A:
Local Transportation Circulation
Map 6 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard
- Road



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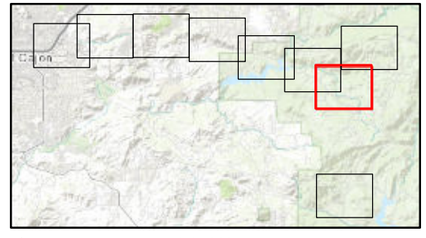
Attachment 3.18-A:
Local Transportation Circulation
Map 7 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard
- Road

ADMINISTRATIVE DRAFT



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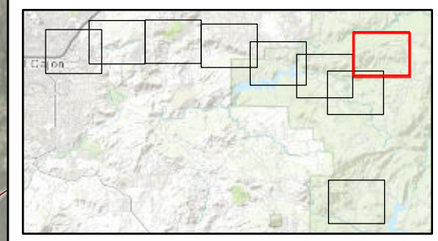
ADMINISTRATIVE DRAFT

Attachment 3.18-A:
Local Transportation Circulation
Map 8 of 9

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Existing Suncrest Substation
- Road



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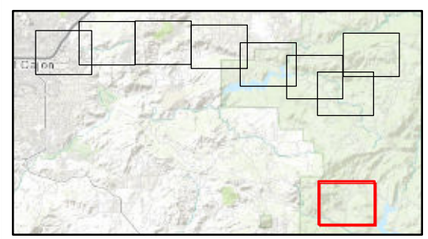
Attachment 3.18-A:
Local Transportation Circulation
Map 9 of 9

Suncrest
230 Kilovolt Loop-In Project

- Staging Yard
- Staging Yard/Fly Yard
- Road



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3.19 TRIBAL CULTURAL RESOURCES

This section describes the existing conditions for tribal cultural resources (TCRs) in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.19.1 Environmental Setting

The environmental setting comprises the regional precontact, ethnographic, and historic setting of the study area. As described in Section 3.6 Cultural Resources, background research and records searches were conducted for the study area, which includes a 1-mile buffer around the Proposed Project components, including the proposed alignment and work areas, as well as a one-parcel buffer around the laydown/staging yards. Within the study area, the term "Proposed Project Area" includes a 150-foot-wide area on either side of the proposed transmission line alignment, a 30-foot-wide area on either side of the centerline of access roads, the footprint of laydown/staging yards, and the footprints of all work areas to account for direct or indirect impacts to tribal cultural resources.

TCRs include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. They are defined in California Public Resources Code (PRC) Section 21074.

The Proposed Project would cross unincorporated communities within San Diego County, California, including private parcels and open space easements. In addition, the Proposed Project would traverse land managed and/or owned by the County of San Diego (County), United States (U.S.) Forest Service (USFS) (i.e., Cleveland National Forest [CNF]), Sweetwater Authority, Endangered Habitats Conservancy, and California Department of Fish and Wildlife. One proposed staging yard would be located in the City of El Cajon. Construction of the Project is anticipated to include the installation of both overhead and underground transmission line segments and modifications to the existing Suncrest Substation.

The following description of the study area's environmental setting is based on and described in more detail in Attachment 3.6-A: Cultural Resources Technical Report, which was prepared by ASM Affiliates, Inc. (ASM) in March 2026 (ASM 2026).

3.19.1.1 Cultural Setting

3.19.1.1.1 Precontact History

A detailed precontact background of the study area is detailed in Section 3.6.1.2 Cultural Setting of Section 3.6 Cultural Resources.

3.19.1.1.2 Indigenous Ethnographic and Linguistic Context

The study area is situated within the traditional territory of the Yuman-speaking Diegueño, or Kumeyaay (Ipai-Tipai); this includes the Kumeyaay and Kamia, as well as groups in northern Baja California. The Kumeyaay historically ranged from the coast through the Peninsular Ranges, while the Kamia inhabited the Imperial Valley and the Colorado River. Their animal

resources primarily consisted of small game, such as rabbits, hares, woodrats, lizards, snakes, and grasshoppers, as well as larger game like mule deer and possibly pronghorn.

The ethnohistoric Ipai-Tipai/Kumeyaay descendants organized their society into patrilineal groups with hereditary political and ceremonial roles. They established permanent villages in oak woodlands and catchment basins near resource extraction sites. Seasonal movements within communal territories were dictated by resource availability. Kumeyaay culture faced significant changes due to missionization and displacement by Hispanic populations in the late 18th and early 19th centuries, and missionization and old world diseases greatly reduced the indigenous population. In the late 1700s, the Kumeyaay population was estimated to number between 3,000 and 9,000 individuals. By 1828, missions documented a population of 1,711 Kumeyaay (Luomala 1978).

By the early 1820s, California was under Mexican rule, which further disrupted indigenous lifestyles with the establishment of ranchos. In 1834, California's missions were secularized, and Native Americans were allocated half of the mission lands. However, they quickly lost these lands due to corrupt administrators, leading many to become serfs or fugitives on their ancestral lands. The U.S. acquired California between 1846 and 1848, and the federal government initially ignored Native American rights, rejecting treaties negotiated in the early 1850s. Euro-American pressures increased as California grew after the Civil War, and these pressures were further exacerbated by diseases like smallpox. The federal census of 1860 recorded 1,571 Kumeyaay residing in 24 villages (Luomala 1978).

Legal reservations were established in eastern San Diego County during the Grant and Hayes administrations, including Capitan Grande (1875), Campo (1893), La Posta (1893), and others. However, these reservations were insufficient to support traditional or mixed economies, leading to dire conditions for the Ipai-Tipai by the 1880s. Overgrazing and water diversion devastated their resources, prompting a recommendation for the removal of white squatters from reservations in 1883 that ultimately led to little action. By the 1890s, many Native Americans worked in ranches, mines, or towns and returned to reservations for community events.

Kumeyaay ancestry has deep ties in what is now San Diego County and northern Baja California, extending thousands of years, as acknowledged in State Assembly Joint Resolution No. 60. Archaeological findings since the 1920s and early accounts have documented their precontact culture, but the most authentic insights come from the Kumeyaay's own oral traditions, including stories and songs passed down through generations. Ethnographic studies reveal a rich vocabulary for describing landforms, highlighting their deep connection to nature (DeCarlo et al. 2020).

Into the 21st century, local Native Americans have preserved elements of their traditional culture while also engaging with the wider community. Recent themes in reservation communities focus on struggles for tribal sovereignty, social justice, economic independence, and the balance between traditional values and modernity, with the development of Native American casinos revitalizing some groups.

According to the Bureau of Indian Affairs, 1,322 Kumeyaay were reported in 1968, of whom 435 lived on reservations (Luomala 1978). By 1990, it was estimated that approximately 1,200

Kumeyaay resided on reservation lands, while approximately 2,000 Kumeyaay lived in other locations. Today, the Kumeyaay Indian Nation is comprised of 12 federally recognized tribes with additional members and groups not currently designated as federal tribes. Additional tribes, subgroups, and tribal family groups are also in existence throughout San Diego County and some overlap with adjacent counties. Table 3.19-1: Tribes of the Kumeyaay Nation in San Diego County lists the primary tribal groups that have affiliation with the geographic region of the Proposed Project.

Traditional Cultural Sites in the Greater Kumeyaay Territory

Traditional cultural locations are named landmarks that form maps of indigenous group's territories and use areas, as well as encapsulating their history, values, and beliefs. In his 1925 study, Alfred Kroeber identified numerous traditional cultural locations in the Kumeyaay Territory, including sites along the San Dieguito River, between the San Dieguito River and San Diego River, and between the San Diego River and Sweetwater River.

Delfina Cuero notes that the Kumeyaay named locations in their territory based on local characteristics (Shipek 1991). For example, "Otay" refers to a weed, "Jamacha" denotes a wild gourd, "Jamul" is named after a common weed near water, and Point Loma is called "black earth" due to its appearance from a distance. Shipek (1987) adds that smaller band territories included common trails, hunting grounds, and religious sites defended by sorcery and arms, all interwoven with the concept of sacred lands described in their creation stories. Nearby holy places include Kuuchamaa or Tecate Peak (Shipek 1985 and ASM 2026).

Each band had unique sacred sites, such as a "sun watcher" mountain for ceremonies led by the sun shaman during solstices and equinoxes. Central to each band was a brush- or pole-enclosed altar reserved for shamans and leaders, as well as designated areas for the sacred disposal of the dead. Other known sacred places within Kumeyaay territory include Mount Guatay (Awaataay), a spring at Descanso (In-yar'en Ah-ha'), and the summit of Viejas Mountain (Kwut'ah Lu'e-ah) (ASM 2026).

Additionally, several archaeological districts have been proposed in San Diego County as Traditional Cultural Properties (TCPs)[1] in the greater Kumeyaay Territory outside of the study area, including Table Mountain (nominated for the National Register of Historic Places [NRHP] in 1982) and the Jacumba Area (proposed for NRHP listing as a precontact gathering and trade area containing sacred sites and evidence of trade and settlement). While 95 traditional cultural locations and two archaeological districts are documented in the greater Kumeyaay territory, only one of these resources has been evaluated as a TCP, and it is also located outside of the study area. No TCPs or TCRs were identified directly in the study area.

In summary, while traditional cultural locations are documented in the greater Kumeyaay territory, none are located within the study area. Further details on traditional cultural sites in the greater Kumeyaay territory are provided in Section 3.3.1 of Attachment 3.6-A: Cultural Resources Technical Report.

[1] In California, TCPs are also referred to as TCRs, as defined in PRC Section 21074(a).

Table 3.19-1: Tribes of the Kumeyaay Nation in San Diego County

Kumeyaay Nation Tribal Name	Language Family
Barona Band of Mission Indians	Tiipay, ’Iipay
Campo Band of Kumeyaay Indians	Tiipay
Ewiiaapaayp Band of Kumeyaay Indians	Tiipay
Inaja Band of Diegueño Mission Indians	’Iipay
Jamul Indian Village	Tiipay
Kwaaymii Laguna Band of Mission Indians	Kamia
La Posta Band of Mission Indians	Tiipay
Manzanita Band of the Kumeyaay Nation	Digueño
Mesa Grande Band of Mission Indians	’Iipay
San Pasqual Band of Mission Indians	Digueño
Iipay Nation of Santa Ysabel	’Iipay
Sycuan Band of the Kumeyaay Nation	Tiipay
Viejas Band of Kumeyaay Indians	Tiipay, ’Iipay

Source: ASM 2026

3.19.1.2 Tribal Cultural Resources Survey Methods

No TCRs were identified through publicly available documentary resources or archaeological surveys; however, the Native American Heritage Commission (NAHC) indicated a positive finding from their Sacred Lands File (SLF) search. Section 3.19.1.3 Outreach to Tribes details the communication with tribal representatives to date. The sections that follow describe the methods and results employed to identify TCRs within or adjacent to the study area.

3.19.1.2.1 Records Search and Historical Research

A record search was conducted to determine if any TCRs listed or potentially eligible for listing on the NRHP or CRHR were present within the study area. Information on previously recorded cultural resources was compiled by SDG&E from records at the California Historical Resources Information System (CHRIS) through the South Coastal Information Center (SCIC). SDG&E provided the results of its records search to ASM on December 20, 2024, and additional information was provided on August 19, 2025, for preparation of the Cultural Resources Technical Report. The SCIC records search returned 133 cultural resources within the study area.

A cultural resource records and literature search was also conducted with the CNF Heritage Program Manager at the Rancho Bernardo Supervisor’s Office. The CNF Heritage Program Manager requested Geographic Information System (GIS) files for the study area and conducted a search of the CNF files. Results of this search were provided to ASM on June 5, 2025. ASM also scheduled an in-person records search with the CNF Heritage Program Manager on June 9, 2025, to review undigitized documents and reports in the CNF files. The records search revealed one previously recorded resource and 14 previous surveys within the study area. No additional

cultural resources were revealed in the CNF records search that were not previously identified at the SCIC.

Further background research of primary and secondary archival materials was conducted through San Diego State University, El Cajon Public Library, online newspaper databases, and Ancestry.com. Historic maps and aerial photographs were inspected via HistoricAerials.com to further understand the development of the study area.

3.19.1.2.2 Pedestrian Surveys

ASM conducted archaeological pedestrian surveys in the Proposed Project Area between April 14 and June 20, 2025, as well as on October 3, 2025. Approximately 482 acres out of the 627-acre Proposed Project Area were surveyed, covering approximately 15 linear miles. Approximately 146 acres were deemed inaccessible due to dense vegetation, steep slopes, or restrictions related to private land access and safety considerations. Per their requests, as detailed in Section 3.19.1.3 Outreach to Tribes, members of local Native American tribal groups joined the surveys on a rotational basis. ASM coordinated with the Manzanita Band of the Kumeyaay Nation, the Viejas Band of Kumeyaay Indians, and the La Posta Band of Diegueño Mission Indians to have tribal representatives join the survey and advise on resource identification and management. No TCRs were identified by the Native American monitors during the survey.

3.19.1.2.3 Identification via Tribal Representatives

ASM conducted two SLF searches with the NAHC and received a response on November 7, 2024, and on April 3, 2025. The NAHC indicated that the Proposed Project has a positive finding for SLF. Included with the NAHC's response was a list of 19 tribal contacts traditionally and culturally affiliated with the geographic region of the Proposed Project. Communication with tribal representatives is detailed in Section 3.19.1.3 Outreach to Tribes.

3.19.1.3 Outreach to Tribes

To support the Cultural Resources Technical Report, ASM contacted tribal representatives identified by the NAHC to request information regarding the potential presence of potential tribal cultural resources within the Proposed Project's APE/API. This correspondence was conducted solely for scoping and research. It did not constitute formal Assembly Bill (AB) 52 consultation under CEQA. ASM sent requests for information to each of the 19 tribal contacts on March 19, 2025, with a second outreach effort on April 22, 2025, to contacts who had not responded. To date, replies from the following tribes have been received for the Proposed Project:

- Viejas Band of Kumeyaay Indians– Resource Management Director Ray Teran of the Viejas Band responded via email on March 20, 2025. Mr. Teran indicated the Proposed Project has cultural ties to the Viejas Band and requested that a Kumeyaay Cultural Monitor be on site for ground-disturbing activities. While not explicitly requested by the Viejas Band, ASM included Viejas Band monitors as a part of a Native American monitor rotation for the Proposed Project surveys.

- Manzanita Band of the Kumeyaay Nation– Chairwoman Angela Elliott-Santos of the Manzanita Band responded via email on March 25, 2025. Ms. Elliott-Santos

acknowledged receipt of the request for information and stated that the Manzanita Band would like to participate in the Proposed Project. In a phone conversation on April 22, 2025, with Senior Archaeologist Terrence Luévano of ASM, Veronica Santos of the Manzanita Band requested that Manzanita Band monitors be included as a part of the Native American monitor rotation for the Proposed Project surveys.

- Kwaaymii Laguna Band of Indians– On April 3, 2025, Chairwoman Carmen Lucas of the Kwaaymii Laguna Band of Indians responded by phone. Ms. Lucas stated that the Proposed Project is not within the Kwaaymii Laguna Band's area of interest. She further recommended that ASM contact the Viejas and Sycuan bands as the Proposed Project would be closer to their lands.

- La Posta Band of Diegueño Mission Indians– Chairman Eric LaChappa, Sr. of the La Posta Band responded on April 22, 2025, expressing the La Posta Band's interest in participating in the Proposed Project surveys. Cultural Coordinator Joe Silva also followed up with ASM to request further information about the Proposed Project and coordinated the La Posta Band's inclusion in the Native American monitor rotation for the surveys.

- Mesa Grande Band of Diegueño Mission Indians– Mesa Grande Band's Cultural Chair Gabriel Kitchen responded via phone on April 22, 2025. Mr. Kitchen, after reviewing the letter, asked if the southern Kumeyaay tribes had been contacted about the Proposed Project. Upon affirmation that they had, and upon being told some had requested to be a part of the surveys, Mr. Kitchen informed ASM that the Mesa Grande Band would defer to the Viejas and Sycuan bands for the Proposed Project.

- Ewiiaapaayp Band of Kumeyaay Indians– Chairman Robert Pinto and Vice Chairman Michael Garcia of the Ewiiaapaayp Band of Kumeyaay Indians individually responded via phone on April 22, 2025. Both stated that the Ewiiaapaayp Band does not have concerns for the Proposed Project, as it falls outside of the Ewiiaapaayp Band's area of interest.

- Campo Kumeyaay Nation– Campo Kumeyaay Nation's Cultural Resource Manager Daniel Tsosie responded via phone on April 22, 2025, to inform ASM that a formal response would be forthcoming. The formal response was sent via email on April 22, 2025. Mr. Tsosie stated that the Campo Kumeyaay Nation wishes to be included in any CEQA and/or National Environmental Policy Act (NEPA) consultation for the Proposed Project. He further stated the Proposed Project is within the Campo Kumeyaay Nation's ancestral Kumeyaay territory and requested inclusion in the environmental review process, citing a previous lack of collaboration in the implementation of best practices for preservation during the construction of the Suncrest Substation within the Proposed Project Area. Mr. Tsosie requested meetings to determine what portions of the Proposed Project would fall under CEQA or NEPA, future site visits, and copies of any documentation regarding cultural resources within the study area. SDG&E staff reached out to Mr. Tsosie on October 2, 2025, to schedule a follow up meeting, but no meeting has yet been scheduled.

- Barona Band of Mission Indians– Tribal Attorney Art Bunce of the Barona Band responded via email on April 22, 2025. On behalf of the Barona Band, he expressed support for the cultural resource surveys for the Proposed Project. Mr. Bunce then acknowledged that the Proposed Project falls within the ancestral territory for the Viejas and Sycuan bands, and that the Barona Band would defer to them and support whatever measures they deemed appropriate for the preservation of cultural resources.

Copies of all correspondences and replies from the NAHC and tribal representatives collated by the applicant are included in Appendix A of Attachment 3.6-A: Cultural Resources Technical Report.

On February 27, 2026 and after the finalization of the Cultural Resources Technical Report, SDG&E's Tribal Liaison spoke to Bernice Paipa of the Sycuan Band of the Kumeyaay Nation. Ms. Paipa recommended that the Proposed Project avoid sacred sites and plans to discuss the Proposed Project further with SDG&E in the near future to provide more input.

3.19.1.3.1 Assembly Bill 52 Consultation

In compliance with AB 52, the California Public Utilities Commission (CPUC) initiated consultation with tribal representatives **[TO BE ADDED BY CPUC]**.

3.19.2 Regulatory Setting

3.19.2.1 Federal

3.19.2.1.1 National Historic Preservation Act

Authorized by the National Historic Preservation Act (NHPA) and administered by the National Park Service (NPS), the NRHP is the official list of the nation's historic places deemed worthy of preservation. It includes districts, sites, buildings, structures, and objects that are significant in American history, prehistory, architecture, archaeology, engineering, and culture. To be eligible for listing in the NRHP, a property must retain sufficient integrity to convey its significance and meet at least one of the following evaluation criteria:

- It is associated with events that have made a significant contribution to the broad patterns of our history.
- It is associated with the lives of significant persons in our past.
- It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may be likely to yield, information important in history or prehistory.

Should a cultural resource be determined eligible for NRHP listing, it is considered a "historic property" under Title 36, Section 60.4 of the Code of Federal Regulations (CFR). Properties listed or formally determined eligible for listing in the NRHP are automatically listed in the CRHR (PRC Section 5024.1[d][1]).

National Register Bulletin 15

The NPS publication, *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a historic property and defines integrity as "the ability of a property to convey its significance" (NPS 1997). The evaluation of integrity must be grounded in an understanding of a historic property's physical features and how they relate to the aspects of integrity. Determining which of these aspects are most important to a property requires knowing why and at what level (i.e., local, state, or national) it is significant and its period of significance. Although "rarity" of property type is not an aspect of significance, it is considered when assessing integrity.

To retain historic integrity, a property must possess several aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. These seven aspects of integrity are defined as follows:

- Location is the place where the historic property was constructed or the place where the historic event occurred.
- Design is the combination of elements that create the form, plan, space, structure, and style of a property.
- Setting is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or man-made, including vegetation, paths, fences, and relationships between other features or open space.
- Materials are the physical elements that were combined or deposited during a particular period or time and in a particular pattern or configuration to form a historic property.
- Workmanship is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property as a whole or to individual components.
- Feeling is a property's expression of the aesthetic or historic sense of a particular period. It results from the presence of physical features that, when taken together, convey the property's historic character.
- Association is the direct link between the important historic event or person and a historic property.

National Register Bulletin 38

In 1990, the NPS and the Advisory Council for Historic Preservation introduced the term TCP through National Register Bulletin 38 (Parker and King 1998, NPS 2024). A TCP may be eligible for listing in the NRHP if it is associated with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the community's continuing cultural identity (Parker and King 1998). In 2024, the NPS

published an updated version of *National Register Bulletin 38: Identifying, Evaluating, and documenting Traditional Cultural Places* (NPS 2024) to provide revised guidance on TCPs.

Federal and state laws require consideration of the concerns of contemporary Native American communities regarding potentially ancestral human remains, associated funerary objects, and items of cultural patrimony. Consequently, an important element in assessing the significance of the Proposed Project Area is evaluating the likelihood that these classes of items are present in areas that could be affected by the Proposed Project.

TCPs represent a category within cultural resource management under federal guidelines and may be relevant to precontact archaeological sites. According to Patricia L. Parker and Thomas F. King (1998), "traditional" refers to beliefs, customs, and practices of a living community that have been passed down through generations, usually orally or through practice. The traditional cultural significance of a historic property derives from the role the property plays in a community's historically rooted beliefs, customs, and practices.

Generally, a TCP may consist of a single site, or group of associated archaeological sites (e.g., district, traditional cultural landscape), or an area of cultural or ethnographic importance. TCPs are defined in National Register Bulletin 38 (NPS 2024) as places significant for their continuing role in the beliefs, customs, and practices of living tribal communities. They may include individual sites, cultural landscapes, or ethnographic places, and they are recognized under both federal and state law. In California, TCPs are also referred to as TCRs, as defined in PRC Section 21074(a).

TCPs and TCRs often encompass both tangible and intangible elements, rooted in community identity, with boundaries defined by cultural values rather than physical markers. TCPs are anchored in space by cultural values associated with community-based, physically defined "property referents" (Parker and King 1998). However, TCPs are largely ideological, which can present challenges in delineating specific boundaries. The extent of a TCP is based on community conceptions of how the surrounding physical landscape interacts with existing cultural values. By definition, a TCP only needs to be important to community members and does not need to be important to the general public.

As described in National Register Bulletin 38, TCP boundaries may be defined by viewscapes, topographic features, the extent of an archaeological district or use area, or a community's sense of its own geographic limits. Outsider acceptance or rejection of this understanding is irrelevant due to the inherently relativistic nature of the concept.

3.19.2.1.2 Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) of 1979 provides for the protection of archaeological resources more than 100 years old that occur on federally owned or controlled lands. The statute makes it unlawful to excavate and/or remove items of archaeological interest from federal lands without a permit, and it defines the process for obtaining such a permit from the responsible federal agency. This process includes a 30-day notification to interested persons, including Native American tribes, by the agency to receive comments regarding the intended issuing of a permit. The law establishes a process for prosecuting persons who illegally remove archaeological materials from lands subject to the ARPA. The law also provides for curation of

archaeological artifacts, ecofacts, notes, records, photographs, and other items associated with collections made on federal lands. Standards for curation are provided for in Title 36, Part 79 of the CFR.

3.19.2.1.3 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (25 United States Code Sections 3001–3013) requires federal agencies and institutions that receive federal funds (including museums, universities, state agencies, and local governments) to repatriate or transfer Native American human remains and other cultural items to the appropriate parties through the following methods:

- consulting with lineal descendants, Native American tribes, and Native Hawaiian organizations (NHOs) on Native American human remains and other cultural items;
- protecting and planning for Native American human remains and other cultural items that may be removed from federal or tribal lands;
- identifying and reporting all Native American human remains and other cultural items in inventories and summaries of holdings or collections; and
- giving notice prior to repatriating or transferring human remains and other cultural items.

NAGPRA recognizes the rights of lineal descendants, Native American tribes, and NHOs in Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony. The Secretary of the Interior is responsible for promulgating regulations to carry out the provisions of NAGPRA and delegated this authority to the Assistant Secretary. Since 1993, the Department of the Interior has published rules under the title "Native American Graves Protection and Repatriation Act Regulations," including the following:

- RIN 1024-AC07, 1993 Proposed Rule (58 Federal Register [FR] 31122, May 28, 1993) and 1995 Final Rule (60 FR 62134, December 4, 1995);

- RIN 1024-AC84, Civil Penalties Final Rule (68 FR 16354, April 3, 2003) and Future Applicability Final Rule (72 FR 13184, March 21, 2007);

- RIN 1024-AD68, 2007 Proposed Rule Disposition of Culturally Unidentifiable Human Remains (72 FR 58582, October 16, 2007) and 2010 Final Rule Disposition of Culturally Unidentifiable Human Remains (75 FR 12378, March 15, 2010);

- RIN 1024-AE00, Disposition of Unclaimed Cultural Items Final Rule (80 FR 68465, November 5, 2015); and

- RIN 1024-AE19. to clarify and improve upon the systematic processes for disposition or repatriation of Native American human remains and cultural items (87 FR 63202, October 18, 2022).

RIN 1024-AE19 revises and replaces definitions and procedures under NAGPRA for lineal descendants, Native American tribes, NHOs, museums, and federal agencies, including other federally funded institutions in control of collections. The regulation establishes systematic procedures for inventorying or summarizing collections of Native American human remains,

funerary objects, sacred objects, or objects of cultural patrimony; determining cultural affiliation; consulting with affiliated tribes, descendants, and NHOs; publishing notices of inventory or summary completion; and, where appropriate, disposition or repatriation of identified remains or items. The rule sets specific timelines and assigns responsibilities to museums, federal agencies, and other covered institutions for completing inventories, summaries, and notices. When repatriation or disposition is requested, the regulation requires deference to the traditional knowledge of lineal descendants, Native American tribes, and NHOs. This rule went into effect on January 12, 2024.

3.19.2.1.4 Region 5 Programmatic Agreement

The *Programmatic Agreement Among The U.S.D.A. Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer, Nevada State Historic Preservation Officer, And The Advisory Council On Historic Preservation Regarding The Processes For Compliance With Section 106 Of The National Historic Preservation Act For Management Of Historic Properties By The National Forests Of The Pacific Southwest Region* is an agreement that aims to manage resources on USFS system lands within the USFS Pacific Southwest Region (Region 5). Stipulations in the Programmatic Agreement (PA) outline that the USFS would ensure that specific measures are carried out, including utilizing historic preservation professionals to implement the agreement, maintaining a site location and survey location record system, and involving tribes and the public in the identification and evaluation of properties. USFS project leaders are responsible for contacting specialists during the planning of an undertaking to determine if it qualifies as an "undertaking" pursuant to the definition provided in Section 301(7) of the NHPA and 36 CFR 800.2(o) under the NHPA and NEPA. The agreement outlines streamlined procedures for reviewing undertakings with little or no potential to affect historic properties. The PA provides a comprehensive framework for managing routine undertakings in the region while ensuring compliance with historic preservation laws and involving relevant stakeholders in the process.

3.19.2.1.5 United States Forest Service Manual 2300

The USFS Manual 2300 – Recreation, Wilderness, and Related Resource Management Chapter 2360 - Heritage Program Management Heritage Program Manual (Forest Service Manual 2360) establishes the framework for managing cultural and historic resources within USFS Region 5. The manual outlines the responsibilities of agency personnel, including Heritage Program managers and staff, in planning, inventory, evaluation, protection, and enhancement of historic properties. The manual emphasizes compliance with federal laws (e.g., NHPA) and sets standards for professional qualifications, documentation, and consultation with State Historic Preservation Officers, Native American tribes, and other stakeholders. It provides guidance for integrating heritage resource management into broader land management activities, ensuring that historic properties are identified, evaluated, and protected during project planning and implementation. The manual also details procedures for training, certification, records management, and ongoing professional development to maintain high standards in heritage stewardship across Region 5 forests.

3.19.2.2 State

3.19.2.2.1 California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are also listed in the CRHR. The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a statewide program with a scope and criteria for inclusion that are similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR. California Historical Landmarks (i.e., buildings, structures, sites, or places that have been determined to have statewide historical significance) are also automatically listed in the CRHR. Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission (SHRC) are also listed in the CRHR. California Points of Historical Interest are sites, buildings, features, or events that are of local (i.e., city or county) significance.

A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in Title 15 California Code of Regulations (Cal. Code Regs.) Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the CRHR criteria is considered a significant historical resource under CEQA. The CRHR uses the following four evaluation criteria, asking if the project:

- is associated with events that have made a significant contribution to the broad patterns of local or regional history, or to the cultural heritage of California or the U.S.;
- is associated with the lives of persons important to local, California, or national history;
- embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values; or
- has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Similar to the NRHP, a historical resource must meet one of these criteria and retain integrity to be listed in the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP.

3.19.2.2.2 California Environmental Quality Act

CEQA requires that lead agencies thoroughly assess the potential impacts of proposed projects upon TCRs. The assessment must evaluate potential direct and indirect effects associated with impacts to TCRs.

PRC Section 5097.94 was amended with the introduction of AB 52 in 2014, which introduced the following new sections:

- Section 21073: defines a "California Native American tribe" as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004 (SB 18);

- Section 21074: definition of "tribal cultural resources" as it relates to CEQA;

- Section 21080.3.1: addresses the requirements for lead agencies to consult with Native American tribes during the environmental review process;

- Section 21080.3.2: California Public Resources Code Section 21080.3.2 establishes provisions for lead agencies regarding the consultation process with Native American tribes concerning proposed projects;

- Section 21082.3, provides guidelines regarding the consideration of tribal cultural resources in the environmental review process;

- Section 21083.09: addresses the protection of tribal cultural resources during the environmental review process;

- Section 21084.2: provides guidelines regarding the identification and consideration of cultural resources in the environmental review process; and

- Section 21084.3: establishes the criteria for determining whether a project has a significant impact on the environment with respect to cultural resources and tribal cultural resources.

The introduction of AB 52 was to ensure the early involvement of California Native American tribes in the environmental review process and to establish a new category of resources requiring consideration under CEQA—known as Tribal Cultural Resources. According to PRC Section 21074(a)(1) and (2), TCRs encompass sites, features, places, cultural landscapes, sacred places, and objects that hold cultural significance to California Native American tribes. These resources may either be listed or deemed eligible for listing in the California Register of Historical Resources, included in a local historical resource register, or identified as TCRs by the lead agency based on substantial evidence.

PRC Section 21080.3.1 stipulates that within 14 days of a lead agency determining that a project application is complete, or upon a public agency's decision to undertake a project, the agency must formally notify designated contacts or tribal representatives of California Native American tribes that have traditional and cultural affiliations within the Proposed Project vicinity (as defined in PRC Section 21073) and have requested written notification (PRC Section 21080.3.1[b]). Tribes interested in engaging in consultation are required to respond in writing within 30 days of receiving the lead agency's notification. The agency must initiate consultation within 30 days of receiving such a request from the tribe (PRC Sections 21080.3.1[d] and 21080.3.1[e]).

The following is a list of potential consultation discussion topics addressed by PRC Section 21080.3.2(a):

- the type of environmental review necessary,
- the significance of tribal cultural resources,
- the significance of a project's impacts on tribal cultural resources,
- project alternatives or appropriate measures for preservation, and
- mitigation measures.

Consultation is considered concluded when either of the following occurs:

- (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2[b]).

In accordance with PRC Section 21080.3.1, if a California Native American tribe has requested consultation but has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with PRC Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an Environmental Impact Report or adopt a Mitigated Negative Declaration (PRC Section 21082.3[d][2] and [3]).

PRC Section 21082.3(c)(1) states that any information, including the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process must not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information must be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

Several provisions of the PRC also govern archaeological finds of human remains and associated objects. Procedures are detailed under PRC Section 5097.98 through 5097.996 for actions to be taken whenever Native American remains are discovered. Furthermore, Section 7050.5 of the HSC states that any person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in PRC Section 5097.99.

Any person removing human remains without authority of law or written permission of the person or persons having the right to control the remains under PRC Section 7100 has committed a public offense that is punishable by imprisonment. PRC Chapter 1.7, Sections 5097.5 and 5097.9 define any unauthorized disturbance or removal of a fossil site or remains on public land as a misdemeanor. Specifically, a person shall not knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or precontact ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands.

3.19.2.2.3 Public Resources Code Section 21083.2

CEQA also applies to effects on archaeological sites that do not meet the criteria for historical resources but do meet the definition of a “unique archaeological resource” (PRC Section 21083.2[g]). A unique archaeological resource is an archaeological artifact, object, or

site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- it contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
- it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
- it is directly associated with a scientifically recognized important precontact or historic event or person.

3.19.2.2.4 California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (PRC Section 5097.9) applies to both state and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are those of a Native American, the coroner must notify the NAHC, which notifies and has the authority to designate the Most Likely Descendant (MLD) of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

PRC Section 5097 specifies the procedures to be followed if cultural resources—and, in particular, human remains—are unexpectedly discovered on nonfederal public land. Section 5097.5 of the PRC states:

> "No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor."

3.19.2.2.5 California Native American Graves Protection and Repatriation Act

Enacted in 2001 and amended in 2020, the California Native American Graves Protection and Repatriation Act (CalNAGPRA) establishes a state-level framework for the respectful treatment, inventory, and repatriation of California Native American human remains and cultural items held by state-funded agencies and museums (California Health and Safety Code Section 8010-8030). CalNAGRPA complements the federal NAGPRA by extending repatriation rights to non-federally recognized California Indian tribes and emphasizing culturally appropriate consultation. CalNAGPRA mandates timely responses to repatriation claims, encourages voluntary returns by private institutions, and empowers the NAHC to oversee dispute resolution and compliance. CalNAGPRA reflects California's commitment to tribal sovereignty, cultural preservation, and restorative justice.

3.19.2.3 Local

3.19.2.3.1 County of San Diego

County of San Diego Local Register of Historic Resources

The criteria for listing historical resources to the Local Register (Ordinance No. 9493) are consistent with those developed by the Office of Historic Preservation for listing resources to the CRHR, but they have been modified for local use in order to include a range of historical resources that specifically reflect the history and prehistory of San Diego County. Only resources that meet the following criteria may be listed or formally determined eligible for listing to the Local Register:

- are associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
- are associated with the lives of persons important to the history of San Diego County or its communities;
- embody the distinctive characteristics of a type, period, San Diego region, or method of construction, or represents the work of an important creative individual, or possess high artistic values; or
- have yielded, or may be likely to yield, information important in prehistory or history.

County of San Diego Resource Protection Ordinance

The Resource Protection Ordinance, County Ordinance 86.601, *et. seq*. (RPO), when applicable, generally requires that cultural resources be evaluated as part of the County's discretionary environmental review process for certain permit types. If cultural resources are found to be significant pursuant to the RPO, they must be preserved. The RPO prohibits development, trenching, grading, clearing, and grubbing, or any other activity or use that damages significant precontact or historic site lands (except for scientific investigations with an approved research design prepared by an archaeologist certified by the Register of Professional Archaeologists).

Pursuant to the RPO, significant precontact or historic sites are sites that provide information regarding important scientific research questions about precontact or historic activities that have scientific, religious, or other ethnic value of local, regional, state, or federal importance. Such locations include, but are not limited to, the following:

- a significant precontact or historic district, site, interrelated collection of features or artifacts, building, structure or object that meets one of the following criteria:
  - formally determined eligible or listed in the NRHP by the Keeper of the National Register; or
  - to which the Historic Resource ("H" Designator) Special Area Regulations have been applied; or
  - one-of-a-kind, locally unique, or regionally unique cultural resources which contain a significant volume and range of data and materials; and/or

- any location of past or current sacred religious or ceremonial observances that meets one of the following criteria:

  - protected under Public Law 95-341, the American Religious Freedom Act, or Public Resources Code Section 5097.9 (e.g., burial(s), pictographs, petroglyphs, solstice observatory sites, sacred shrines, or religious ground figures); or

  - other formally designated and recognized sites with ritual, ceremonial, or sacred value to any precontact or historic ethnic group.

San Diego County General Plan

The primary focus of the San Diego County General Plan's Conservation and Open Space Element is to provide direction to future growth and development in San Diego County with respect to the conservation, management, and utilization of natural and cultural resources; the protection and preservation of open space; and the provision of park and recreation resources.

The following verbatim goals and policies that are relevant to TCRs and the Proposed Project are derived from the Conservation and Open Space Element of the San Diego County General Plan (County of San Diego 2011):

- **Goal COS-7: Protection and Preservation of Archaeological Resources.** Protection and preservation of the County's important archeological resources for their cultural importance to local communities, as well as their research and educational potential.

  - **Policy COS-7.1: Archaeological Protection.** Preserve important archaeological resources from loss or destruction and require development to include appropriate mitigation to protect the quality and integrity of these resources.

  - **Policy COS-7.2: Open Space Easements.** Require development to avoid archeological resources whenever possible. If complete avoidance is not possible, require development to fully mitigate impacts to archaeological resources.

  - **Policy COS-7.3: Archaeological Collections.** Require the appropriate treatment and preservation of archaeological collections in a culturally appropriate manner.

  - **Policy COS-7.4: Consultation with Affected Communities.** Require consultation with affected communities, including local tribes, to determine the appropriate treatment of cultural resources.

  - **Policy COS-7.5: Treatment of Human Remains.** Require human remains be treated with the utmost dignity and respect and that the disposition and handling of human remains would be done in consultation with the MLD and under the requirements of federal, state, and County regulations.

- **Goal COS-8: Protection and Conservation of the Historic Built Environment.** Protection, conservation, use, and enjoyment of the County's important historic resources.

    - **Policy COS-8.1: Preservation and Adaptive Reuse.** Encourage the preservation and/or adaptive reuse of historic sites, structures, and landscapes as a means of protecting important historic resources as part of the discretionary application process, and encourage the preservation of historic structures identified during the ministerial application process.

Notwithstanding the forgoing, the Proposed Project is exempt from the requirement that the County of San Diego approve any discretionary permits, pursuant to CPUC General Order 131-E, Sections XI and XIII.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed and no policies that are relevant to tribal cultural resources and the Proposed Project were identified (County of San Diego 2020).

Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan

Chapter 3.1 of the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan identifies the following issue, goal, and policy pertaining to cultural resources (County of San Diego 2011), provided verbatim:

- **Issue COS 1.4**: The Subregion with its oak woodlands, rock outcrops, and drainages has a high potential for archaeological resources. Within the Subregion, four major prehistoric Indian villages, two historic villages, and over 50 other archaeological sites have been identified.

- **Goal COS 1.4:** The preservation of identified archaeological sites through identification and protection of sites in conjunction with development.

    - **Policy COS 1.4.1:** Require undisturbed onsite preservation of significant archaeological sites through open space easements or site sealing.

3.19.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals or policies that pertain to the Proposed Project concerning tribal cultural resources were identified (City of El Cajon 2000).

3.19.3 Impact Analysis and Mitigation Measures

3.19.3.1 Analysis Methodology

The impact analysis for tribal cultural resources is based on information summarized in Section 3.19.1 Environmental Setting that was obtained from reviews of the following sources:

- a cultural resources records and literature search of documents and maps on file at the SCIC via the CHRIS inventory;
- a cultural resource records and literature search of documents and maps on file with the CNF Heritage Program Manager at the Rancho Bernardo Supervisor's Office;
- Attachment 3.6-A: Cultural Resources Technical Report;
- SLF searches at the NAHC;
- Native American tribal outreach from individuals recommended by the NAHC as people who may have information concerning the Proposed Project; and
- historic aerial images, maps, photographs, and archival materials via desktop reviews.

3.19.3.2 Applicant-Proposed Mitigation Measures

The following applicant-proposed measure (APM) would be implemented for the Proposed Project in the event a new tribal cultural resource is identified:

- **APM TRIB-01**: Should a previously unidentified tribal cultural resource be discovered during the course of the Project's site preparation, grading, excavation, construction, or other activity, all operations within 50 feet of the discovery will cease and SDG&E's Cultural Resource Specialist will be immediately contacted. The Principal Investigator, Native American monitor, and SDG&E's Cultural Resources Specialist will determine if additional cultural resources work is needed to evaluate the discovery, or if a formal evaluation is required. If the tribal cultural resource is listed or eligible for listing on the NRHP, CRHR, or a local register, the resource will either be avoided, preserved in place, or treatment will be determined during tribal consultation. Ground-disturbing work in the vicinity of the discovery will not resume without authorization by the CPUC and after the appropriate consultation has taken place with interested Native American Tribes.

In addition to APM TRIB-01, APM BIO-05 from Section 3.5 Biological Resources and APMs CUL-03, CUL-04, CUL-05, and CUL-06 and MM CUL-02 from Section 3.6 Cultural Resources would apply to TCRs and would be implemented for the Proposed Project. APM BIO-05 includes archaeological and tribal cultural resource sensitivity training for personnel working in sensitive areas of the Proposed Project. APMs CUL-03 through CUL-06 include measures for cultural resources surveys, environmental sensitive area demarcation, utilizing existing disturbance areas, and archaeological monitoring. MM CUL-02 includes the development and implementation of a Cultural Resources Monitoring Plan.

3.19.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For TCRs, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

  - Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k); or

  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 50421.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.19.3.4 Impact Analysis

3.19.3.4.1 Impact TRIB-01: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1?

Construction

Less-than-Significant Impact. As discussed in Attachment 3.6-A: Cultural Resources Technical Report, no TCRs were identified through publicly available resources or archaeological surveys in the Proposed Project study area. However, two SLF searches with the NAHC conducted on November 7, 2024, and on April 3, 2025, resulted in a positive finding. Based on the list provided by the NAHC, 19 tribal representatives with traditional and cultural affiliation with the geographic region of the Proposed Project were contacted on March 19, 2025 and April 22, 2025 for informational purposes. To date, no TCRs have been identified through preliminary outreach to tribes. Formal government-to-government consultation will be conducted before the approval of the Proposed Project.

While impacts to TCRs are not anticipated, Proposed Project components that require earth-moving and excavation may result in the discovery of previously undisturbed TCRs that could be damaged or destroyed by further excavation activities. Approximately 146 acres (or 23 percent) of the Proposed Project Area has not yet been surveyed due to access restrictions. Previously unknown TCRs could be located within these areas, such as rock art sites (e.g., paintings or petroglyphs), rock structures or monuments, or archaeological sites with tribal significance. Per

APM CUL-03, cultural resource surveys would be conducted prior to construction for any Proposed Project Areas that were not previously surveyed; this may include areas where landowner permission was not obtained, as well as new Proposed Project components.

Portions of the Proposed Project have been categorized as sensitive for the presence of buried archaeological deposits, as depicted in Appendix C of Attachment 3.6-A: Cultural Resources Technical Report, some of which may also be considered TCRs by Native Americans. In order to avoid and reduce the potential for direct impacts to previously unknown TCRs in areas determined sensitive for buried archaeological deposits, the monitor would flag sensitive areas and coordinate with construction personnel to verify that applicable measures are followed. APM CUL-06 also involves stopping work in the event of a potential resource discovery so that it can be evaluated. Additionally, SDG&E would implement APM BIO-05, which requires SDG&E's Worker Environmental Awareness Training (WEAP) for construction personnel on the recognition of potential cultural resources (e.g., precontact artifacts, objects, or features) during construction. The WEAP would provide construction personnel with instruction on compliance with APMs, mitigation measures, and other Proposed Project requirements, including identification of potential resources and the requirement to halt work in the event of a potential discovery.

Per APM CUL-06, in the event that new archaeological resources with tribal significance are discovered during the Proposed Project, the archaeological and tribal monitors would instruct construction personnel to stop work in the immediate area of the resource until the Principal Investigator, SDG&E archaeologist, and tribal representative, in coordination with the CPUC, determine the appropriate course of action in accordance with CEQA. If on CNF, the Region 5 PA will be followed.

Coordination with appropriate Native American monitors will continue throughout the construction of the Proposed Project to assess and mitigate impacts on potential tribal cultural resources and properties. In accordance with APM TRIB-01, inadvertent discoveries of tribal cultural resources during construction will halt operations within 50 feet, requiring immediate communication with the Native American monitor, Principal Investigator, and SDG&E's Cultural Resource Specialist, who will determine necessary actions in coordination with CPUC before resuming work. If the tribal cultural resource is listed or eligible for listing on the NRHP, CRHR, or a local register, the resource will either be avoided, preserved in place, or handled as determined during tribal consultation. With the implementation of APMs TRIB-01, CUL-03 through CUL-06 and BIO-05, no substantial adverse changes to TCRs are anticipated, and impacts to tribal cultural resources as defined in PRC Section 15064.5 would be less than significant.

Operations and Maintenance

No Impact. O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features. As described in Chapter 2 Project Description, O&M would primarily involve regular inspections, vegetation management, and access road management in previously disturbed areas. Therefore, impacts to TCRs are not anticipated during O&M.

3.19.3.4.2 Impact TRIB-02: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1?

Construction

Less-than-Significant Impact. Based on the findings presented in Attachment 3.6-A: Cultural Resources Technical Report and the responses received to date from Native American representatives, no TCRs were identified in the Proposed Project study area. Formal government-to-government consultation will be conducted before the approval of the Proposed Project. Tribal consultation will continue throughout all phases of the Proposed Project, as deemed necessary. If any tribal cultural resources are identified in the Proposed Project Area, they will be either avoided, preserved in place, or treatment will be determined during consultation. As a result, any potential impacts will be less than significant.

Operations and Maintenance

No Impact. O&M activities associated with the Proposed Project would not involve substantial ground disturbance or installation of new features. As described in Chapter 2 Project Description, O&M would primarily involve regular inspections, vegetation management, and access road management in previously disturbed areas. Therefore, impacts to TCRs are not anticipated during O&M.

3.19.4 References

ASM. 2026. Cultural Resources Technical Report for the Suncrest 230 kV Loop-In Project.

Byrd, B. and L. Raab. 2007. Five views of California prehistory: Archaeological perspectives on native California. Altamira Press, Walnut Creek.

California Assembly Bill No. 978. 2001-2002. California Health and Safety Code, Division 7, Part 2, Chapter 5 (California Native American Graves Protection and Repatriation Act), Section 8010-8030. Online. https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=7.&title=&part=2.&chapter=5.&article=. Site accessed February 2026.

City of El Cajon. 2000. The City of El Cajon General Plan. Online. https://www.elcajon.gov/your-government/departments/community-development/planning-division/adopted-planning-code-information. Site visited November 2025.

County of San Diego. 2007a. Guidelines for Determining Significance—Cultural Resources: Archaeological and Historic Resources. Land Use and Environment Group, Department

of Planning and Land Use and Department of Public Works. First Revision. December 5, 2007.

County of San Diego. 2007b. Report Format and Content Requirements—Cultural Resources: Archaeological and Historic Resources. Land Use and Environment Group, Department of Planning and Land Use and Department of Public Works. First Revision. December 5, 2007.

County of San Diego. 2011. General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited December 2025.

County of San Diego. 2011. Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. Online. https://www.sandiegocounty.gov/pds/docs/CP/Crest_CP.pdf. Site visited February 2026.

County of San Diego. 2020. Draft Alpine Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited December 2025.

DeCarlo, Matthew, Jessica Colston, and Micah Hale. 2020. Cultural Resources Inventory for the Trails at Carmel Mountain Ranch Project, Carmel Mountain Ranch Community, City of San Diego, California. Dudek Project No. 12151. Prepared for New Urban West, San Diego California.

Derry, L., J. McIntyre, and L. White. 1985. Cultural resources overview of the Cleveland National Forest, California. USDA Forest Service.

Kroeber, A. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Washington, D.C.: Smithsonian Institution.

Luomala, Katharine. 1978. "Tipai-Ipai". In Heizer, Robert F. (ed.). Handbook of North American Indians. Vol. 8: California. Washington, DC: Smithsonian Institution. pp. 592–609.Meighan, C. 1954. A Late Complex in southern California prehistory. UCLA Archaeological Survey Annual Report 1954: 106–116.

Meltzer, D. 1993. Search for the first Americans. Smithsonian Books, Washington, D.C.

Moratto, M. 1984. California archaeology. Orlando: Academic Press.

Moriarty, J. 1966. Cultural phase divisions in southern California prehistory. San Diego Museum of Man Paper 3.

NPS. 1997. How to apply the National Register criteria for evaluation. National Register Bulletin 15. Washington, D.C.

NPS. 2024. National Register Bulletin 38 (Update) Identifying, Evaluating, and documenting Traditional Cultural Places. Update to Parker King 1990, updated 1998). December 6,

2024. Online. https://irma.nps.gov/DataStore/DownloadFile/713057. Site visited January 15, 2025.

Parker, P. and T. King. 1998. Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin 38. Originally published 1990 (revised 1992), U.S. Department of the Interior, National Park Service, Washington, D.C.

Rogers, M. 1938. Prehistoric man of the desert. San Diego Museum Papers 3.

Rogers, M. 1939. Early lithic industries of the Lower Basin of the Colorado River and adjacent desert areas. San Diego Museum Papers 3.

Rogers, M. 1945. An outline of Yuman prehistory. Southwestern Journal of Anthropology 1(2): 167–198.

True, D. L. 1958. An early complex in San Diego County, California. American Antiquity 23(3): 255–263.

True, D. L. 1966. Archaeological differentiation of shifting communities at San Luis Rey. Ph.D. dissertation, University of California, Los Angeles.

True, D. L. 1970. Investigation of a Late Prehistoric complex in Cuyamaca Rancho State Park, San Diego County, California. University of California Archaeological Survey Annual Report 12: 223–254.

U.S. Census Bureau. 2020. 2020 Census Results Access Data. Online. https://data.census.gov/all?q=san%20diego. Site visited August 18, 2025.

USFS. 2008. Forest Service Manual 2300 – Recreation, Wilderness, and Related Resource Management, Chapter 2360 – Heritage Program Management (Amendment 2300-2008-1). Washington, DC: National Headquarters – Washington Office.

USFS. 2013. Pacific Southwest Region, California State Historic Preservation Officer, Nevada State Historic Preservation Officer, & Advisory Council on Historic Preservation. Programmatic Agreement Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region.

Warren, C. 1964. Cultural change and continuity on the San Diego coast. Unpublished Ph.D. dissertation, University of California, Los Angeles.

Warren, C. 1966. The San Dieguito complex: A review and hypotheses. American Antiquity 31(3): 346–360.

Warren, C. 1967. The San Dieguito–La Jolla continuum. San Diego Museum Papers 5: 1–16.

Warren, C. and D. True. 1961. The San Dieguito complex and its place in California prehistory. University of California Archaeological Survey Annual Report 54: 246–262.

Warren, C. 1987. The San Dieguito complex and its place in California prehistory. In San Dieguito–La Jolla: Chronology and controversy, pp. 25–40. San Diego County Archaeological Society Research Paper 1.

Warren, C., M. Gallegos, and D. True. 1993. Cultural traditions and ecological adaptations of southern California prehistory. Los Angeles: UCLA Institute of Archaeology.

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3.20 UTILITIES AND SERVICE SYSTEMS

This section describes the existing conditions for utilities and service systems in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.20.1 Environmental Setting

3.20.1.1 Water Supply

The Proposed Project would be located within San Diego County, which has a semi-arid to arid desert climate with limited local water supplies. The county has several water providers, sources, and districts. The San Diego County Water Authority (SDCWA), a public agency created in 1944, is the primary purveyor of water in the county. The SDCWA is comprised of its 22 member agencies—including six cities, five water districts, three irrigation districts, seven municipal water districts, and one federal agency (military base)—and serves 3.3 million residents across the county (SDCWA 2025a).

Historically, the county has relied on the majority of its water being imported from the Colorado River and State Water Project by the Metropolitan Water District of Southern California. The county still receives water from the Metropolitan Water District of Southern California but has made efforts to diversify its water sources (County of San Diego [County] 2011a). In 2003, the SDCWA executed a Quantification Settlement Agreement with the Imperial Irrigation District and began receiving conserved water via the All-American and Coachella canals; this water now accounts for approximately half of San Diego County's water supply (SDCWA 2025b). To further enhance the county's local water supply, the SDCWA entered into a formal Water Purchase Agreement with Poseidon Water in 2012 to develop the Carlsbad Desalination Plant. Commercial operation of the desalination plant began in 2015, and the facility has a production capability of 56,000 acre-feet per year (AF/YR). The desalination plant provides approximately 50 million gallons per day (MGD) of high-quality drinking water.

On a local level, various member agencies develop and manage local water resources to supplement the water they receive from the SDCWA. These resources include reservoirs, groundwater supply, recycled water, and potable reuse supplies (SDCWA 2021). One of these member agencies—Sweetwater Authority—is a publicly owned water agency that provides water service to approximately 200,000 people in San Diego County. A portion of the 230 kV overhead (OH) segment crosses Loveland Reservoir, which is managed by Sweetwater Authority and provides approximately 25,400 acre-feet of storage capacity. Projected water supply and demand levels for Sweetwater Authority are presented in Table 3.20-1: Sweetwater Authority Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR).

West of Loveland Reservoir and associated Sweetwater Authority property, the western end of the 230 kV OH and the western underground (UG) segment fall within the Padre Dam Municipal Water District (MWD), which is an SDCWA member agency. Projected water supply and demand levels for the Padre Dam MWD are presented in Table 3.20-2: Padre Dam Municipal Water District Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR).

Table 3.20-1: Sweetwater Authority Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR)

Year Type	2025	2030	2035	2040	2045
Normal Year					
Supply	21,104	21,581	22,057	23,031	23,659
Demand	21,104	21,581	22,057	23,031	23,659
Difference	0	0	0	0	0
Single Dry Year					
Supply	22,581	23,092	23,601	24,643	25,315
Demand	22,581	23,092	23,601	24,643	25,315
Difference	0	0	0	0	0
Multiple Dry Year (First Year)					
Supply	22,581	23,092	23,601	24,643	25,315
Demand	22,581	23,092	23,601	24,643	25,315
Difference	0	0	0	0	0
Multiple Dry Year (Second Year)					
Supply	22,792	23,307	23,822	24,873	25,552
Demand	22,792	23,307	23,822	24,873	25,552
Difference	0	0	0	0	0
Multiple Dry Year (Third Year)					
Supply	22,792	23,307	23,822	24,873	25,552
Demand	22,792	23,307	23,822	24,873	25,552
Difference	0	0	0	0	0
Multiple Dry Year (Fourth Year)					
Supply	23,003	23,523	24,042	25,104	25,788
Demand	23,003	23,523	24,042	25,104	25,788
Difference	0	0	0	0	0
Multiple Dry Year (Fifth Year)					
Supply	23,003	23,523	24,042	25,104	25,788
Demand	23,003	23,523	24,042	25,104	25,788
Difference	0	0	0	0	0

Source: Sweetwater Authority 2021

Table 3.20-2: Padre Dam Municipal Water District Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR)

Year Type	2025	2030	2035	2040	2045
Normal Year					
Supply	13,674	14,818	15,855	16,705	17,176
Demand	13,674	14,818	15,855	16,705	17,176
Difference	0	0	0	0	0
Single Dry Year					
Supply	14,586	15,751	16,819	17,685	18,148
Demand	14,586	15,751	16,819	17,685	18,148
Difference	0	0	0	0	0
Multiple Dry Year (First Year)					
Supply	14,586	15,751	16,819	17,685	18,148
Demand	14,586	15,751	16,819	17,685	18,148
Difference	0	0	0	0	0
Multiple Dry Year (Second Year)					
Supply	14,732	15,909	16,987	17,862	18,329
Demand	14,732	15,909	16,987	17,862	18,329
Difference	0	0	0	0	0
Multiple Dry Year (Third Year)					
Supply	14,789	16,068	17,157	18,040	18,513
Demand	14,789	16,068	17,157	18,040	18,513
Difference	0	0	0	0	0
Multiple Dry Year (Fourth Year)					
Supply	15,028	16,228	17,329	18,221	18,698
Demand	15,028	16,228	17,329	18,221	18,698
Difference	0	0	0	0	0
Multiple Dry Year (Fifth Year)					
Supply	15,178	16,391	17,502	18,403	18,885
Demand	15,178	16,391	17,502	18,403	18,885
Difference	0	0	0	0	0

Source: Padre Dam MWD 2021

The remaining portion of the proposed 230 kV OH segment, the eastern UG segment, and the existing Suncrest Substation are located in areas that depend on private water systems, such as wells. The proposed Greenfield Yard is under the jurisdiction of the Helix Water District (Helix), which is an SDCWA member agency. Projected water supply and demand levels for Helix are presented in Table 3.20-3: Helix Water District Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR)Table 3.20-3: Helix Water District Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR).

SDCWA has invested in carryover storage supplies to help achieve reliability in dry years, with both in-region surface water storage and out-of-region groundwater storage in California's Central Valley. SDCWA supplies water to its member agencies through the First San Diego Aqueduct and the Second San Diego Aqueduct; although most water travels through the aqueduct system via gravity alone, both of these aqueducts are equipped with several pumping stations that enhance the pipeline system's operational flexibility. SDCWA utilizes storage facilities to support everyday operations and to keep extra water on hand for times of drought, seasonal demand changes, or emergencies. System Regulatory Storage facilities consist of enclosed storage tanks made of reinforced concrete, and they are used to regulate the flow of both treated and untreated water each day. The aqueduct system currently holds a total of 56 million gallons in these tanks, and the majority of this water is located in Twin Oaks Valley and Mission Trails Regional Park. Between SDCWA and its 22 member agencies, 13 water treatment plans are operated in-region to deliver high-quality drinking water to residents of the county, with a total of 812 MGD of treatment plant capacity.

3.20.1.2 Wastewater

Most of the sewage treatment and disposal in the unincorporated areas of San Diego County is accomplished by either regional systems maintained by public water or sewer districts, small wastewater treatment facilities operated by independent districts or the County, or on-site subsurface sewage disposal (i.e., septic) systems (County of San Diego 2011a).

Multiple SDCWA member agencies provide wastewater services (e.g., wastewater collection, treatment, and disposal) within the county; many of these wastewater treatment plants (WWTPs) and water reclamation facilities (WRFs) are located in the northern portion of the county. The WRFs nearest to the Proposed Project are the Ralph W. Chapman WRF and the Ray Stoyer WRF. The Ray Stoyer WRF is currently undergoing an expansion under the authority of the East County Advanced Water Purification Joint Powers Authority (JPA). The newly expanded WRF will be operated by the JPA, which is made up of the Padre Dam MWD, the County, the City of San Diego, and Helix. Construction of the facility is scheduled to be concluded by the end of 2025 and operation is expected to begin in 2026 (East County Magazine 2023). These wastewater facilities and their planned treatment capacities are presented in Table 3.20-4: 2025 Wastewater Facilities Planned Treatment Capacities (MGD). Additionally, the County Sanitation District collects, conveys, treats, and disposes of wastewater from eight unincorporated communities (County Department of Public Works [DPW] 2025).

Table 3.20-3: Helix Water District Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR)

Year Type	2025	2030	2035	2040	2045
Normal Year					
Supply	31,033	31,964	32,674	33,114	33,468
Demand	31,033	31,964	32,674	33,114	33,468
Difference	0	0	0	0	0
Single Dry Year					
Supply	48,497	48,524	48,551	48,577	48,604
Demand	35,851	37,167	38,394	39,339	40,316
Difference	12,646	11,357	10,157	9,238	8,288
Multiple Dry Year (First Year)					
Supply	48,793	47,277	46,949	47,816	47,632
Demand	34,869	35,218	35,570	35,926	36,285
Difference	13,924	12,059	11,379	11,890	11,347
Multiple Dry Year (Second Year)					
Supply	48,820	47,302	46,974	47,841	47,657
Demand	36,209	36,571	36,937	37,306	37,679
Difference	12,611	10,731	10,037	10,535	9,978
Multiple Dry Year (Third Year)					
Supply	48,846	47,326	46,998	47,865	47,681
Demand	37,538	37,914	38,293	38,676	39,063
Difference	11,308	9,412	8,705	9,189	8,618
Multiple Dry Year (Fourth Year)					
Supply	48,873	47,351	47,023	47,890	47,706
Demand	38,778	39,165	39,557	39,953	40,352
Difference	10,095	8,186	7,466	7,937	7,354
Multiple Dry Year (Fifth Year)					
Supply	48,899	47,376	47,047	47,914	47,730
Demand	39,733	40,130	40,531	40,937	41,346
Difference	9,166	7,246	6,516	6,977	6,384

Source: Helix 2020

Table 3.20-4: 2025 Wastewater Facilities Planned Treatment Capacities (MGD)

WWTP	Primary	Secondary	Tertiary
Ralph W. Chapman WRF	1.3	1.3	1.3
Ray Stoyer WRF[1]	16.0	16.0	16.0

Source: SDCWA 2021

The County DPW Wastewater Management Section oversees the O&M of sewer infrastructure (e.g., gravity lines, pump stations, force mains, and wastewater treatment facilities) in the unincorporated communities of Alpine, Campo, East Otay Mesa, Julian, Lakeside, Pine Valley, Spring Valley, and Winter Gardens. Wastewater generated in Alpine, East Otay Mesa, Lakeside, Spring Valley, and Winter Gardens is conveyed to the City of San Diego's Metropolitan Wastewater System for centralized treatment and disposal. The communities of Campo, Julian, and Pine Valley utilize inland[2] treatment and disposal systems (County of San Diego 2011a).

3.20.1.3 Stormwater Drainage

The County has a complex storm drainage system composed of streets and gutters, catch basins, underground pipes, ditches, pump stations, and channels; this system carries water away from homes and businesses into rivers and streams. The County DPW regularly inspects this system and provides maintenance as needed.

3.20.1.4 Solid Waste

Fifty-four active solid waste facilities are located throughout San Diego County. The Waste Management (WM) Refuse and Recycling facility and the Sycamore Landfill are the nearest solid waste facilities to the Proposed Project. Both facilities accept all types of garbage and recycling, including e-waste. The Inland Pacific Resource Recovery facility is the closest organic waste disposal facility to the Proposed Project. The EDCO Station Transfer and Buy-Back Center is the nearest construction and demolition (C&D) waste disposal facility to the Proposed Project (County of San Diego 2024). The landfill capacities and estimated close dates for each of these facilities are provided in Table 3.20-5: Landfills and Recycling Facilities.

3.20.1.5 Electricity and Natural Gas

SDG&E is the primary provider of both electricity and natural gas in San Diego County. Figure 2-1: Existing Transmission Lines in Chapter 2 – Project Description displays the existing electric transmission lines in the Proposed Project Area.

SDG&E-owned and -operated transmission lines exist along the western end of the Proposed Project's western 230 kV UG segment and parallel much of the eastern portion of the Proposed Project's 230 kV OH segment as well as the eastern UG segment, with one SDG&E 500 kV transmission line connecting to the existing Suncrest Substation from the south.

[1] Planned treatment capacities for the Ray Stoyer WRF are based on the anticipated capacities of the expanded facility.
[2] Inland sewage treatment and disposal occurs through reuse, spray fields, evaporation, and other techniques.

Table 3.20-5: Landfills and Recycling Facilities

Landfill Name	Approximate Distance from the Proposed Project (miles)	Remaining Total Landfill Capacity (cubic yards)	Landfill Average Daily Capacity (tons per day)	Estimated Closure Date	Accepted Waste Types
WM Refuse and Recycling	4.7	Information not available (INA)	4,500	INA	Mixed municipal
Sycamore Landfill	3.5	99,477,838	5,000	12/31/2042	Wood waste, tires, shreds, dead animals, agricultural, sludge, mixed municipal, contaminated soil, asbestos, green materials
Inland Pacific Resource Recovery	6.6	INA	100,00	INA	Wood waste, green materials
EDCO Station Transfer and Buy-Back Center	7.9	INA	2,000	INA	Green materials, industrial, C&D, mixed municipal

Source: California Department of Resources Recycling and Recovery (CalRecycle) 2025a

SDG&E's primary and secondary distribution lines are abundant throughout the Proposed Project's 230 kV UG segment and the western portion of the 230 kV OH segment; these distribution lines are primarily concentrated around existing neighborhoods and roadways. No natural gas infrastructure exists within the right-of-way of the Proposed Project.

3.20.1.6 Telecommunications

Spectrum and Cox provide cable television services to the Proposed Project Area. Telephone services in the Proposed Project Area are generally provided by AT&T, Verizon, and T-Mobile, while internet service is provided by AT&T Internet Air. Starlink, Hughes Net, and Viasat provide satellite services to the Proposed Project Area (Broadbandnow 2025).

3.20.2 Regulatory Setting

3.20.2.1 Federal

3.20.2.1.1 Southern California National Forests Land Management Plan

The following verbatim forest-specific design criterion concerning utilities and utility infrastructure is derived from Part 2: Cleveland National Forest Strategy of the Southern California National Forests Land Management (United States [U.S.] Forest Service [USFS] 2005):

- **S5:** Consolidating major transportation and utility corridors by co-locating facilities and/or expanding existing corridors.

Additionally, the following verbatim fish and wildlife standard concerning utilities and service infrastructure on forests and grasslands is derived from Part 3: Design Criteria for Southern California National Forests:

- **S22:** Except where it may adversely affect threatened and endangered species, linear structures such as fences, major highways, utility corridors, bridge upgrades or replacements, and canals will be designed and built to allow for fish and wildlife movement.

3.20.2.2 State

3.20.2.2.1 Urban Water Management Planning Act

All urban water suppliers within the State of California are required to prepare Urban Water Management Plans. California Water Code Sections 10610 through 10656 and Section 10608 detail the information that must be included in these plans, as well as the agency that must file them (California Department of Water Resources [DWR] 2025a).

3.20.2.2.2 Integrated Waste Management Act of 1989

The Integrated Waste Management Act of 1989 mandated that California's jurisdictions divert 50 percent of their solid waste from landfills by the year 2000. The act made California cities, counties, and approved regional solid waste management agencies responsible for enacting plans and implementing programs to meet the state's mandate. All California cities, counties, and

approved regional solid waste management agencies are responsible for enacting plans and implementing programs to divert 50 percent of their solid waste each year (CalRecycle 2025b).

Senate Bill 1383

Senate Bill (SB) 1383, passed in 2016, superseded Assembly Bills 341 and 1826. SB 1383 focuses on reducing methane climate pollution by setting targets for reducing organic food waste. Specifically, the bill sets the following targets for 2025:

- 75 percent less organic waste sent to landfills; and
- 20 percent of unsold, still-edible food sent to food recovery organizations.

SB 1383 requires local jurisdictions to provide organic waste collection services to all residents and businesses unless they have an exemption or require people to independently separate waste that they haul to disposal facilities themselves (CalRecycle 2025c).

3.20.2.2.3 California Green Building Standards Code, Title 24, Part 11

Section A5.408 of Title 24, Part 11 of the 2022 California Green Building Standards Code sets forth rates for the diversion of C&D waste. These rates are classified by Tier 1 and Tier 2 standards, and the standards become mandatory within a city or county if adopted by a city or county. Tier 1 specifies that at least 65 percent of non-hazardous C&D waste for a project will be diverted to recycle or salvage. Tier 2 specifies that at least 80 percent of non-hazardous C&D waste generated at a project site will be diverted to recycling or salvage facilities (California Building Standards Commission 2023).

3.20.2.3 Local

3.20.2.3.1 County of San Diego

San Diego County General Plan

The following verbatim policies that are relevant to utilities and service systems are derived from the San Diego County General Plan (County of San Diego 2011a):

- **Policy LU-4.6: Planning for Adequate Energy Facilities.** Participate in the planning of regional energy infrastructure with applicable utility providers to ensure plans are consistent with the County's General Plan and Community Plans and minimize adverse impacts to the unincorporated county.

- **Policy LU-12.3: Infrastructure and Services Compatibility.** Provide public facilities and services that are sensitive to the environment with characteristics of the unincorporated communities. Encourage the collocation of infrastructure facilities, where appropriate.

- **Policy LU-12.4: Planning for Compatibility.** Plan and site infrastructure for public utilities and public facilities in a manner compatible with community character, minimize visual and environmental impacts, and whenever feasible, locate any facilities and supporting infrastructure outside preserve areas. Require context sensitive Mobility Element road design that is compatible with community character and minimizes visual

and environmental impacts; for Mobility Element roads identified in Table M-4, an LOS D or better may not be achieved.

- **Policy COS-11.5: Collaboration with Private and Public Agencies.** Coordinate with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

Alpine Community Plan

The Draft Alpine Community Plan does not contain any goals or policies related to utilities and service systems and the Proposed Project (County of San Diego 2020).

Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan

The following verbatim goal that is relevant to utilities and service systems and the Proposed Project is derived from the Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan (County of San Diego 2011b):

- **Goal CM 7.2.** Liquid waste that is disposed of in a manner that minimizes adverse impacts to water quality.

County of San Diego Construction and Demolition Materials Diversion Program

Article II: Construction and Demolition Materials Diversion Program of the San Diego County Code of Regulatory Ordinances establishes the Construction and Demolition Debris Program in the unincorporated area of San Diego County. Applicable projects under this ordinance include the following:

- new construction projects,
- non-residential building additions or alterations,
- residential additions and alterations that increase a building's size or footprint,
- demolition projects, and
- residential excavation and grading projects.

Projects are separated into different classes as specified under Section 68.513 of the ordinance; and Section 68.514 lists the requirements, by class, for the Debris Management Plan and Report. All applicable projects must complete and comply with the Debris Management Plan and Report to avoid project suspension (County of San Diego 2025).

San Diego County Water Authority 2020 Urban Water Management Plan

The 2020 Urban Water Management Plan by SDCWA presents a long-term strategy to ensure water reliability through 2045. It supports 24 (now 22) member agencies with a diverse supply mix that includes imported water, desalination, groundwater, recycled water, and conservation. Water demand is expected to grow to over 630,000 acre-feet by 2045, but ongoing efficiency programs help manage this increase. The plan evaluates supply reliability under drought and climate change scenarios and finds that the region can meet demands even in dry years. It

includes a Water Shortage Contingency Plan for emergencies and uses financial tools like a rate stabilization fund to maintain service stability. Through regional coordination, supply diversification, and conservation, SDCWA is positioned to provide a sustainable and resilient water supply for decades to come (SDCWA 2021).

3.20.2.3.2 City of El Cajon

City of El Cajon General Plan

The following verbatim objectives and policies that are relevant to the Proposed Project and utilities and service systems are derived from the City of El Cajon General Plan (City of El Cajon 2000):

- **Objective 1-6.** The undergrounding of utility lines on a systematic basis will be continued.
- **Policy 1-6.1.** The utilities for all new development and all major redevelopment in the city shall be undergrounded.
- **Policy 1-6.2.** The utilities for all expansion projects in the city shall be undergrounded whenever and wherever practical.
- **Policy 1-6.3.** The City shall continue to coordinate its underground policies and underground projects with the public utilities.
- **Policy 1-6.4.** The City shall continue to coordinate the undergrounding of utilities with street improvement projects.
- **Policy 1-6.5.** Redevelopment funds may be used to achieve the undergrounding of public facilities where other reasonable alternatives cannot be found.
- **Objective 8-8.** Use existing water supplies wisely and adhere to water quality control standards.

3.20.3 Impact Analysis and Mitigation Measures

3.20.3.1 Analysis Methodology

Evaluation of potential impacts on utilities and service systems was based on a review of local, state, and federal utility provider documents, the San Diego County General Plan, City of El Cajon General Plan, and desktop review of the Proposed Project Area. Impacts on utilities and service systems that could result from implementation of the Proposed Project were identified by comparing the baseline provision of utilities and service systems to future demand and potential disruptions in service from implementation of the Proposed Project.

3.20.3.2 Applicant-Proposed Measures

No applicant-proposed measures were proposed related to utilities and service systems.

3.20.3.3 Significance Criteria

The thresholds of significance for assessing impacts come from the CEQA Appendix G Environmental Checklist. For utilities and service systems, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

3.20.3.4 Impact Analysis

3.20.3.4.1 Impact UTL-01: Would the project result in relocated, new, or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities that could cause significant environmental effects?

Construction

Water

Less-than-Significant Impact. Construction of the Proposed Project would require the temporary use of water and wastewater facilities by construction workers. Water would be used during construction activities for dust control, fire suppression, and soil compaction during certain earthwork activities. Water would be obtained from one or more sources, including municipal water sources or water supply vendors and most likely obtained from a nearby fire hydrant. However, the actual location and source of water would be determined by the construction contractor at the time of construction. During peak periods of construction activity, one to two water trucks, each having a typical capacity of up to 5,000 gallons, would be needed for dust control of an approximately 3-mile-long and 14-foot-wide unpaved access road on a daily basis. Additionally, the construction of new access roads would require water for dust control and potentially compaction depending on the design. Due to the relatively small volumes of water required on a daily basis, stockpiling or storing water onsite is not anticipated. However, if water storage is required, water would be stored within the proposed staging yards. In total, it is estimated that 5 million to 10 million gallons of water would be required on site during the construction of the Proposed Project. Construction crews would be responsible for providing

their own drinking water during construction. SDG&E would confirm that the previously mentioned water sources have adequate capacity prior to sourcing water from them. As a result, impacts would be less than significant.

Wastewater and Stormwater

Less-than-Significant Impact. Wastewater streams anticipated for the Proposed Project primarily include sanitary waste and stormwater runoff. Sanitary waste from self-contained portable toilets would be routinely pumped as needed and would be taken by the vendor to a sanitary waste facility for disposal. The sanitary waste that would be generated is estimated at 2,080 gallons per week per 40 workers on site. Sanitary waste would be transported by the licensed sanitary waste service providers for off-site disposal at their contracted treatment, storage, and disposal facility. Therefore, no new or relocated permanent sewer infrastructure would be required to accommodate sanitary waste produced during construction.

The proposed 230 kV UG segments would involve the construction of two underground duct banks, both of which would require excavation depths of approximately 7 feet. In August 2025, the nearest groundwater monitoring station in El Cajon reported a groundwater depth of approximately 11.5 feet below ground surface (California DWR 2025b). Therefore, groundwater could potentially be encountered during excavation activities required for the installation of the 230 kV UG segments. In the event that groundwater is encountered, excavations would be dewatered using one or more pumps. The water would then be either discharged on site to an upland location, if permitted, or stored in Baker tanks or similar water retention equipment within staging yards prior to disposal off site. Typically, groundwater encountered in excavations would be pumped directly into water trucks and transported to a temporary storage location or discharged on access roads and work areas for dust control. In all cases, water discharges would be conducted in accordance with all applicable federal and state regulations and in a manner that minimizes erosion and avoids impacting surface waters in the vicinity. Dewatering methods are described further in Section 2.6.6.2 Dewatering of Chapter 2 – Project Description.

The Proposed Project may increase stormwater runoff in some areas due to the introduction of new impervious services; however, this increase in runoff would be minimal because new impervious surfaces would be limited to the diameter of each pole. Additionally, there are currently no Municipal Separate Storm Sewer Systems in the Proposed Project Area, and stormwater would be conveyed primarily through existing natural drainage patterns.

A stormwater conveyance system consisting of brow ditches and retention ponds currently exists within the existing Suncrest Substation property. Because modifications to the existing substation would result in immeasurable changes to impervious surfaces, no changes to the existing stormwater conveyance system would be required. In addition, usage of the temporary staging/laydown yards during construction is not anticipated to substantially change existing drainage patterns. As necessary, erosion control devices (e.g., straw wattles) would be deployed to control stormwater runoff and sediment control structures would installed around the perimeter of each staging/laydown yard. Therefore, no new stormwater conveyance systems would be necessary and existing natural drainage patterns are not expected to be impacted. As a result, impacts would be less than significant.

Stormwater runoff would be managed according to a Stormwater Pollution Prevention Plan (SWPPP) prepared to comply with the Construction Stormwater General Permit Order 2022-0057-DWQ and approved by the San Diego Regional Water Quality Control Board. The SWPPP would be prepared by SDG&E and contain best management practices (BMPs) specific to managing stormwater during construction of the Proposed Project. BMPs prescribed in the SWPPP include, but are not limited to, the following:

- planning soil disturbance activities to avoid periods of rain whenever practical;
- installing silt fences, gravel bag berms, sandbag barriers, and/or straw wattles to intercept and slow the flow of sediment-laden runoff;
- implementing BMPs (e.g., silt fence, gravel bags, filter fabric) at storm drains or other drainage inlets;
- tracking controls to reduce off-site tracking of sediment and other pollutants;
- managing stockpiles via the placement of temporary BMPs (e.g., secured covers over the piles, silt fences, fiber rolls);
- constructing sediment basins; and/or
- implementing Active Treatment Systems to reduce turbidity of runoff.

Electric Power and Natural Gas

Less-than-Significant Impact. The Proposed Project would include the construction of an approximately 3.6-mile-long 230 kV western UG segment, an approximately 11.1-mile-long 230 kV OH segment, an approximately 0.6-mile-long 230 kV eastern UG segment, and modifications to the existing Suncrest Substation. To provide temporary construction power and a backup power source, portable gas/diesel generators would be used. If a nearby existing OH distribution system is available, it may be tapped to provide power. Therefore, no new or relocated electric power facilities would be required to provide power for the construction of the Proposed Project.

Prior to beginning any ground-disturbing work, SDG&E would contact Underground Service Alert, at 8-1-1, to notify utility companies to mark and locate existing underground structures along the entire length of the current construction area for the Proposed Project. Additionally, SDG&E would probe and expose existing utilities that may be in close proximity to the Proposed Project or require monitoring during construction of the Proposed Project. Construction methods would be adjusted as necessary to maintain the integrity of existing utility lines. Therefore, no new or relocated natural gas facilities would be required and significant environmental effects would not occur. As a result, impacts would be less than significant.

Telecommunications

Less-than-Significant-Impact. For the existing Suncrest Substation, existing telecommunications within the substation boundaries would be modified as needed to accommodate the new equipment additions. For the proposed 230 kV OH segment, Optical Ground Wire (OPGW) cables would be installed to provide fiber optic communication for system protection, control, and operational needs. In addition to the OH installation, the Proposed Project also includes the installation of fiber optic segments along the proposed 230 kV UG segments where necessary to maintain system connectivity. Telecommunication cables and associated infrastructure would be part of the OPGW installations. These OPGW installations

would occur within the footprint of the OH and UG segments; therefore, impacts would be less than significant.

Operations and Maintenance

Water

No Impact. O&M of the Proposed Project would not require the construction or relocation of water infrastructure. Water would likely be supplied from one or more sources, including municipal water sources or water supply vendors. O&M of the Proposed Project would not require significant water supplies because the proposed 230 kV transmission line and existing substation would be unmanned and remotely operated. O&M would not require water usage beyond what is currently used at the existing Suncrest Substation as routine maintenance of the proposed 230 kV transmission line would not require equipment washing. As a result, no impact would occur.

Wastewater and Stormwater

No Impact. The proposed 230 kV transmission line and existing substation would be unmanned on a day-to-day basis during O&M and therefore would not require the construction or relocation of wastewater facilities and associated sewage infrastructure. If crews are required to visit the Proposed Project Area for maintenance activities, off-site restroom facilities would be used. O&M of the Proposed Project would not affect stormwater drainage; therefore, O&M activities for the Proposed Project would not require new or relocated stormwater infrastructure. As a result, no impact would occur.

Electric Power and Natural Gas

No Impact. O&M of the Proposed Project would not require new, expanded, or relocated electrical power or natural gas facilities. Therefore, no impact would occur.

Telecommunications

No Impact. O&M of the Proposed Project would not require new, expanded, or relocated telecommunications facilities. Therefore, no impact would occur.

3.20.3.4.2 Impact UTL-02: Would the project have insufficient water supplies available to serve the project and reasonably foreseeable future development?

Construction

Less-than-Significant Impact. It is estimated that 5 million to 10 million gallons of water would be required on site during the approximately 5-year-long construction process. As previously stated, water required for the construction of the Proposed Project would be supplied by one or more sources, including municipal water sources or water supply vendors. Two water supply sources that could supply water during the construction of the proposed 230 kV transmission line and during modifications to the existing Suncrest Substation would be the Sweetwater Authority and the Padre Dam MWD, both of which are SDCWA member agencies. Although Table 3.20-1: Sweetwater Authority Normal, Single, and Multiple Dry Year Water Supply and Demand (AF/YR) and Table 3.20-2: Padre Dam Municipal Water District Normal,

Single, and Multiple Dry Year Water Supply and Demand (AF/YR) show no surplus in water supply after factoring in projected demand levels, water used during the construction of the Proposed Project would account for such a small percentage of water supply[3]—0.14 and 0.22 percent,[4] respectively—that the water demand for construction of the Proposed Project would be negligible compared to water supplies. Additionally, the Sweetwater Authority and Padre Dam MWD would be able to purchase/import water as needed to meet demand levels. Therefore, water supplies would be sufficient to serve Proposed Project construction.

Water required for the proposed Greenfield Yard would be supplied by Helix. Water demand for this staging yard would have a negligible impact on Helix's water supply, as water would be used solely for dust control and equipment washing. Therefore, water supplies would be sufficient to serve this staging yard. As a result, impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. The daily operation of the Proposed Project would not require water. As previously discussed, water used for cleaning equipment or facilities would be negligible, and there would be sufficient water to supply O&M activities. As a result, impacts would be less than significant.

3.20.3.4.3 Impact UTL-03: Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Construction

Less-than-Significant Impact. During construction, portable toilets would be provided for workers. Portable toilet waste would be disposed of by a third-party wastewater disposal company at appropriately licensed facilities that have adequate capacity to accommodate construction of the Proposed Project. Therefore, impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. The proposed 230 kV transmission line and existing Suncrest Substation would be unmanned and would not require permanent sanitary facilities. Portable toilets may be brought on site during certain maintenance activities, and wastewater would be disposed of by a third-party wastewater disposal company at an appropriate facility. Therefore, impacts would be less than significant.

[3] Sweetwater Authority and Padre Dam MWD's 2025 water supplies were used in calculating percentages.
[4] In these calculations, it is assumed the Proposed Project would use the highest estimated water amount during construction—10 million gallons.

3.20.3.4.4 Impact UTL-04: Would the project exceed capacity of solid waste facilities and be incompliant with solid waste statutes and regulations?

Construction

Less-than-Significant Impact. Solid waste generated during construction would primarily be non-hazardous waste, including metal, paper, and plastic packaging. Construction debris volumes are estimated to total up to 2,340 cubic yards. If possible, recyclable construction material would be transported to an approved recycling facility. Construction waste that cannot be recycled would ultimately be disposed of at the Sycamore Landfill or another approved facility. As detailed in Table 3.20-5: Landfills and Recycling Facilities, the Sycamore Landfill has a remaining total capacity of 99,477,838 cubic yards, and the construction debris volumes are estimated to occupy less than 0.01 percent of the total capacity. Therefore, the Proposed Project would not generate solid waste in excess of the capacity of local infrastructure. Additionally, construction waste would be disposed of in accordance with applicable federal, state, and local laws regarding solid waste, including the California Integrated Waste Management Act of 1989, which set reduction rates for solid waste sent to landfills. As a result, impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impacts. The existing Suncrest Substation would continue to be unmanned during operations and monitored remotely by SDG&E's Skills/Mission Control Center in the community of Serra Mesa using telecommunications, control and protection, and Supervisory Control and Data Acquisition systems. Some routine maintenance, such as replacing or upgrading parts, would generate waste. However, waste generated during O&M would be minimal and infrequent. Any waste generated by O&M activities would also be disposed of at the Sycamore Landfill or another approved facility. O&M of the Proposed Project would not generate solid waste in excess of state or local standards or in excess of the capacity of local infrastructure. All non-hazardous solid waste generated during O&M would be disposed of in accordance with all applicable federal, state, and local laws and transported to the appropriate waste management facility. Therefore, impacts would be less than significant.

3.20.3.4.5 Impact UTL-05: Would the project not comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Construction, Operations and Maintenance

No Impact. All construction waste associated with the Proposed Project would be disposed of properly and in accordance with all applicable federal, state, and local laws regarding solid and hazardous waste. Therefore, no impact would occur.

3.20.4 References

Broadbandnow. 2025. Find Every Internet Provider In Your Area. Online. https://broadbandnow.com/. Site visited May 2025.

California Building Standards Commission. 2022. 2022 California Fire Code, Title 24, Part 9. Online. https://codes.iccsafe.org/content/CAFC2022P1. Site visited May 2025.

California Building Standards Commission. 2023. 2022 California Green Building Standards Code, Title 24, Part 11. Online. https://codes.iccsafe.org/content/CAGBC2022P2/appendix-a5-nonresidential-voluntary-measures#CAGBC2022P2_AppxA5_SecA5.408. Site visited May 2025.

California Code of Regulations. 2024. Article 4 – Fire Prevention Standards for Electric Utilities. Online. https://regulations.justia.com/states/california/title-14/division-1-5/chapter-7/article-4/. Site visited May 2025.

California DWR. 2025a. Urban Water Management Plans. Online. https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans. Site visited May 2025.

California DWR. 2025b. Current Groundwater Levels. Online. https://dwr.maps.arcgis.com/apps/dashboards/ba713497858845d0bf60d400f414d8c3. Site visited August 2025.

CalRecycle. 2025a. SWIS Facility/Site Search. Online. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search. Site visited May 2025.

CalRecycle. 2025b. Enforcement. Online. https://calrecycle.ca.gov/lgcentral/enforcement/#:~:text=The%20California%20Integrated%20Waste%20Management,waste%20by%201995%20and%2050. Site visited May 2025.

CalRecycle. 2025c. California's Organic Waste Reduction. Online. https://calrecycle.ca.gov/organics/slcp/. Site visited June 2025.

County DPW. 2025. San Diego County Sanitation District. Online. https://www.sandiegocounty.gov/content/sdc/dpw/wasteh2o.html. Site visited June 2025.

County of San Diego. 2011a. Chapter 3 Land Use Element. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/docs/GP/LandUseElement.pdf. Site visited May 2025.

County of San Diego. 2011b. Crest/Dehesa/Harbison Canyon/Granite Hills Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/gpupdate/CREST-CP-11-18-15.pdf. Site visited January 2026.

County of San Diego. 2020. Draft Alpine Community Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/advance/CommunityPlans/20201029-CommunityPlan-Print.pdf. Site visited January 2026.

County of San Diego. 2024. Construction and Demolition Recycling Facility Directory. Online. https://www.sandiegocounty.gov/content/dam/sdc/dpw/SOLID_WASTE_PLANNING_a

nd_RECYCLING/Files/CD%20Guide_Updated_12092024_PDF.pdf. Site visited May 2025.

County of San Diego. 2025. Article II: Construction and Demolition Materials Diversion Program. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-130724. Site visited May 2025.

CPUC. 2020. Rules for Overhead Electric Line Construction General Order No. 95. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M338/K730/338730245.pdf. Site visited May 2025.

East County Magazine. 2023. Advanced Water Purification Construction On Target, On Budget. Online. https://www.eastcountymagazine.org/advanced-water-purification-construction-target-budget. Site visited August 2025.

FindLaw. 2024a. California Code, Public Resources Code 4292. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-4292/. Site visited May 2025.

FindLaw. 2024b. California Code, Public Resources Code 4293. Online. https://codes.findlaw.com/ca/public-resources-code/prc-sect-4293. Site visited May 2025.

Helix. 2020. Urban Water Management Plan. Online. https://www.hwd.com/DocumentCenter/View/317/2020-Urban-Water-Management-Plan-PDF. Site visited August 2025.

National Weather Service. 2025b. Understanding Wildfire Warnings, Watches, and Behavior. Online. https://www.weather.gov/safety/wildfire-ww. Site visited May 2025.

Padre Dam MWD. 2021. 2020 Urban Water Management Plan. Online. https://www.padredam.org/DocumentCenter/View/5620/2020-Urban-Water-Management-Plan. Site visited June 2025.

SDCWA. 2021. 2020 Urban Water Management Plan. Online. https://www.sdcwa.org/wp-content/uploads/2021/08/2020-UWMP_Final-Print-Version-July-2021-1.pdf. Site visited May 2025.

SDCWA. 2025a. Our Members. Online. https://www.sdcwa.org/member-agencies/our-members/. Site visited May 2025.

SDCWA. 2025b. About Us. Online. https://www.sdcwa.org/about-us/. Site visited May 2025.

Sweetwater Authority. 2021. 2020 Urban Water Management Plan. Online. https://www.sweetwater.org/DocumentCenter/View/2594/2020-Urban-Water-Management-Plan-PDF. Site visited June 2025.

State Water Resources Control Board (SWRCB). 2021a. National Pollutant Discharge Elimination System (NPDES - Utility Vaults). Online. https://www.waterboards.ca.gov/water_issues/programs/npdes/utilityvaults.html#:~:text=Water%20Quality%20Order%202014%2D0174%2DDWQ%20became%20effective%20on%20July,Waters%20of%20the%20United%20States. Site visited May 2025.

SWRCB. 2021b. Safe Drinking Water Plan for California. Online. https://www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan/docs/ExecSumPlan_Report.pdf. Site visited May 2025.

SWRCB. 2025. Portor-Cologne Water Quality Control Act. Online. https://www.waterboards.ca.gov/laws_regulations/docs/portercologne.pdf. Site visited May 2025.

U.S. EPA. 2024a. Drinking Water Program. Online. https://www.waterboards.ca.gov/drinking_water/programs/. Site visited May 2025.

U.S. EPA. 2024b. Summary of the Clean Water Act. Online. https://www.epa.gov/laws-regulations/summary-clean-water-act. Site visited May 2025.

U.S. EPA. 2025a. National Pollutant Discharge Elimination System (NPDES). Online. https://www.epa.gov/npdes. Site visited May 2025.

U.S. EPA. 2025b. Overview of the Safe Drinking Water Act. Online. https://www.epa.gov/sdwa/overview-safe-drinking-water-act. Site visited May 2025.

USFS. 2005. Land Management Plan Part 2 Cleveland National Forest Strategy. Online. https://www.fs.usda.gov/sites/nfs/files/legacy-media/cleveland/Cleveland%20National%20Forest%20Land%20Management%20Plan.pdf. Site visited September 2025.

3.21 WILDFIRE

This section describes the existing conditions for wildfire in the area of the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project); summarizes relevant federal, state, and local regulations; and analyzes the potential impacts that may result from the construction, as well as operations and maintenance (O&M) of the Proposed Project.

3.21.1 Environmental Setting

The environmental setting describes the existing conditions in the Proposed Project Area that include the topography, fire risks and responsibilities, Wildland-Urban Interface (WUI), fire behavior, values at risk, evacuation routes, and applicable regulations and mitigation programs.

The topography in the Proposed Project's vicinity includes hilly terrain, and the climate is generally warm, with low annual rainfall occurring mostly during the winter months. The vegetation surrounding the proposed 230 kV transmission line and the existing Suncrest Substation consists primarily of chaparral, coastal sage scrub, and coastal sage scrub/chaparral mix, as described in Section 3.5 Biological Resources. Land uses crossed include primarily open space/undeveloped land and residential areas, including the unincorporated communities of Alpine, Crest, and Harbison Canyon.

3.21.1.1 Fire Threat Districts, Fire Risk Areas, and Responsibility Areas

The California Public Utilities Commission (CPUC) High Fire Threat District (HFTD) classifications identify fire threat areas with a higher risk of fires associated with utilities. Tier 1 HFTDs are zones near communities, roads, and utility lines and can be a direct threat to public safety. Tier 2 HFTDs are areas of elevated risk from utility-related wildfires. Tier 3 HFTDs are areas of extreme risk from utility-related wildfires. The Proposed Project would be within both CPUC Tier 2 and Tier 3 HFTDs (CPUC 2021a), as summarized in Table 3.21-1: CPUC HFTDs Crossed by the Proposed Project and shown in Figure 3.21-1: CPUC HFTDs Crossed by the Proposed Project.

In addition to the CPUC HFTD classifications, the California Department of Forestry and Fire Protection (CAL FIRE) identifies Fire Hazard Severity Zones (FHSZs) that specify the risk of wildfires for all fire-prone areas in the state, regardless of landownership or responsibility. Table 3.21-2: FHSZs Crossed by the Proposed Project summarizes the FHSZs crossed by the Proposed Project.

The Board of Forestry and Fire Protection classifies lands into Fire Protection Responsibility Areas. The Fire Protection Responsibility Areas determine who has financial responsibility for wildland fire protection and prevention in an area, and they are summarized as follows:

- **Federal Responsibility Areas (FRAs):** The United States (U.S.) Forest Service (USFS) and the Department of Defense are financially responsible for FRAs. FRA lands are usually national forests, wilderness areas, military bases, or other lands under the jurisdiction of the federal agencies listed.

Table 3.21-1: CPUC HFTDs Crossed by the Proposed Project

Proposed Project Component	Tier 2 HFTD	Tier 3 HFTD	Not in a HFTD
Proposed 230 kV overhead (OH) segment		●	
Proposed 230 kV eastern underground (UG) segment		●	
Proposed 230 kV western UG segment	●		
Proposed High Glen Staging Yard		●	
Proposed High Glen Fly Yard		●	
Proposed Swat Staging Yard		●	
Proposed Lyons Valley Staging/Fly Yard		●	
Proposed Sweetwater Staging/Fly Yard		●	
Proposed Hospital Staging Yard			●
Proposed Greenfield Staging Yard			●
Existing Suncrest Substation		●	

Table 3.21-2: FHSZs Crossed by the Proposed Project

Proposed Project Component	Moderate FHSZ	High FHSZ	Very High FHSZ
Proposed 230 kV OH segment[1]			●
Proposed 230 kV eastern UG segment			●
Proposed 230 kV western UG segment			●
Proposed Greenfield Staging Yard	●	●	●
Proposed High Glen Staging Yard			●
Proposed High Glen Fly Yard			●
Proposed Swat Staging Yard			●
Proposed Lyons Valley Staging/Fly Yard			●
Proposed Sweetwater Staging/Fly Yard			●
Proposed Greenfield Staging Yard	●	●	●
Proposed Hospital Staging Yard			●
Existing Suncrest Substation			●

[1] While the majority of the proposed 230 kV transmission line would be located within SRAs, the eastern portion of the proposed 230 kV OH segment would be located in FRAs.

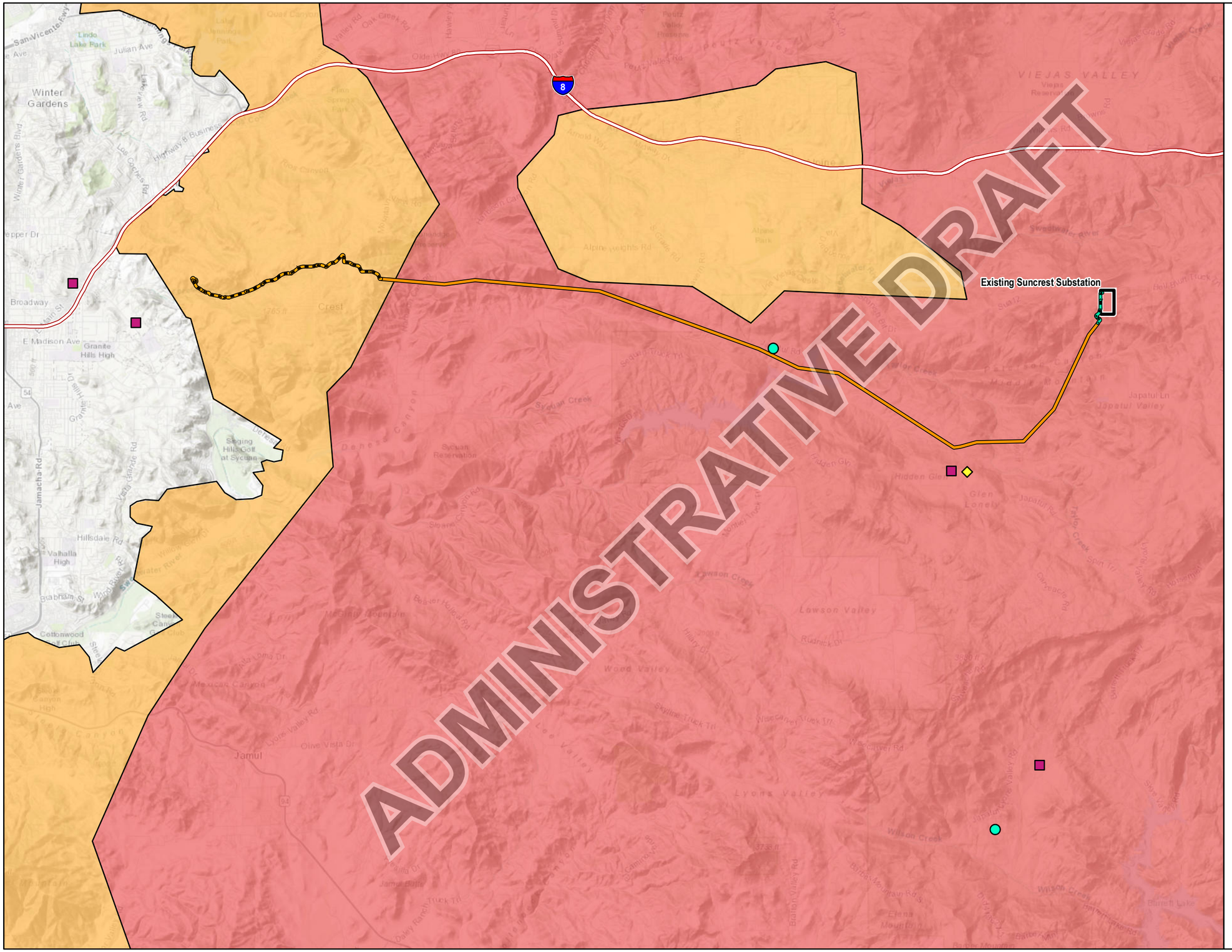


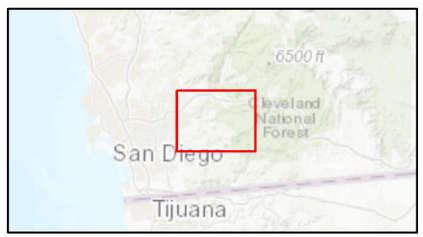
Figure 3.21-1:
CPUC HFTDs
Crossed by the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Highway
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Existing Suncrest Substation
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment

California Public Utilities Commission

- Tier 2
- Tier 3



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- **State Responsibility Areas (SRAs):** CAL FIRE is financially responsible for SRAs. Incorporated cities and federal ownership are excluded.

- **Local Responsibility Areas (LRAs):** The local government (e.g., city fire departments, fire protection districts, counties, and CAL FIRE under contract) is financially responsible for LRAs. LRAs include incorporated cities, urban regions, agricultural lands, and some portions of the desert.

Figure 3.21-2: Fire Hazard Severity Zones and Fire Protection Responsibility Areas shows the FHSZs with the FRAs, SRAs, and LRAs in the Proposed Project Area.

3.21.1.2 Wildland-Urban Interface

A WUI is an area where undeveloped wildland vegetation and residential areas meet (U.S. Fire Administration 2025). WUIs are areas of concern for wildfires, with homes being at a high risk of being impacted due to the surrounding vegetation. Development can be classified into the following three WUI classes:

- Interface Zone: areas of dense urban development adjacent to the wildland areas;
- Intermix Zone: sparse development spread into a landscape that maintains the wildland characteristics; and
- Influence Zone: wildfire-susceptible vegetation up to 1.5 miles from the Interface or Intermix Zones (CAL FIRE 2022).

The proposed 230 kV UG western segment would cross all three zones, and the proposed 230 kV OH segment would cross Intermix Zones and Influence Zones. The proposed 230 kV UG eastern segment would cross and SDG&E's existing Suncrest Substation would be located within an Influence Zone. The proposed Greenfield Staging Yard would be in an Interface Zone. The proposed Sweetwater Staging/Fly Yard, High Glen Staging Yard, and High Glen Fly Yard would be in an Influence Zone. The proposed Hospital Staging Yard, Lyons Valley Staging/Fly Yard, and Swat Staging Yard would not be in any WUI zone. The WUI classifications in the Proposed Project vicinity are depicted in Figure 3.21-3: Wildland Urban Interface.

3.21.1.3 Fire Risk

A Wildfire Modeling Report (WMR) for the Proposed Project is provided in Attachment 3.21-A: Wildfire Modeling Report. As described in the WMR, the Scott Burgan Fuel Model was utilized to identify distinct distributions of fuel loading found among surface fuel components (i.e., live and dead), size classes, and fuel types (LANDFIRE 2025) across the Proposed Project. The dominant fuel type along the proposed 230 kV western UG segment is Urban/Developed (NB1), which would be unlikely to cause fire spread. The existing Suncrest Substation is primarily located on the Bare Ground (NB9) fuel type, which is classified as land devoid of enough fuel to support wildland fire spread. However, the dominant fuel type along the proposed 230 kV eastern UG segment is moderate load, dry climate grass-shrub (GS2), which consists of grass and shrubs with a high spread rate and a moderate flame length. The dominant fuel types along the proposed 230 kV OH segment are GS2 and high load, dry climate shrub (SH5), which consist of woody shrubs and heavy shrub load with a very high spread rate and flame length.

The vegetation communities in the vicinity of the Proposed Project include chaparral species, which are highly flammable. These species have stem and leaf adaptations, which increase fire intensity due to their coating with ether extractives. With high extractive content, as well as low moisture levels, these vegetation communities can be highly flammable fire fuel during the autumn season (USFS 2012).

Based on data from the Alpine Remote Automated Weather Station, which is located approximately 2 miles north of the Proposed Project center, fire risk in the area is also influenced by several climatic and topographic factors. Over the past 10 years, the site has experienced an average annual air temperature of 63 degrees Fahrenheit and relative humidity of 50 percent, indicating generally warm and moderately dry conditions conducive to vegetation drying and potential fire ignition. Prevailing winds are primarily from the east (18 percent), east-southeast (14 percent), southwest (15 percent), and west-southwest (14 percent) with speeds ranging from 4 to 13 miles per hour (mph), which suggest a heightened potential for fire spread in multiple directions, especially during elevated fire weather conditions. The area's complex topography includes elevations ranging from 749 to 3,057 feet above mean sea level (AMSL) across the proposed 230 kV UG segment and the proposed 230 kV OH segment, which may further influence fire behavior by affecting wind flow, fuel distribution, and suppression access. Together, these factors contribute to a high fire risk profile in the Proposed Project Area.

The potential risk of wildfire occurring in the Proposed Project Area is considered to be high. The Proposed Project would be located within CPUC Tier 2 and Tier 3 HFTDs and is in the CAL FIRE Very High FHSZs. While the proposed 230 kV western UG segment and the existing Suncrest Substation would primarily cross the NB1 and NB9 fuel types, respectively, which have minimal fire risk potential, the GS2 and SH5 fuel types present along the proposed 230 kV eastern UG segment and the proposed 230 kV OH segment are prone to high and very high rates of fire risk. Numerous fires have been recorded in the region, and as outlined in Attachment 3.21-A: Wildfire Modeling Report, the rate of spread could exceed 100 feet per minute under easterly winds of 8 mph or southwesterly winds of 13 mph. Furthermore, flame lengths could reach up to 20 feet with easterly winds and 25 feet with southwesterly winds. Considering the area's fuel types, topography, climate, wildfire history, and fire behavior predictions, the Proposed Project is in a region with a very high wildfire risk.

3.21.1.4 Fire Occurrence

A wildfire is defined in Section 51177(j) of the California Government Code as "an unplanned, unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to extinguish the fire." CAL FIRE defines a "large fire" as being 300 acres or greater (CAL FIRE 2022). Further, Section 5.20.1.2 of the CPUC Guidelines requires identification of recent (i.e., within the past 10 years) large fires that have occurred within the Proposed Project vicinity.

The CAL FIRE Wildfire Perimeters database was reviewed for large fires within 3 miles of the Proposed Project. The fire perimeters are depicted in Figure 3.21-4: Historic Fire Occurrence and described in Table 3.21-3: Historic Fire Occurrence within 3 Miles of the Proposed Project.

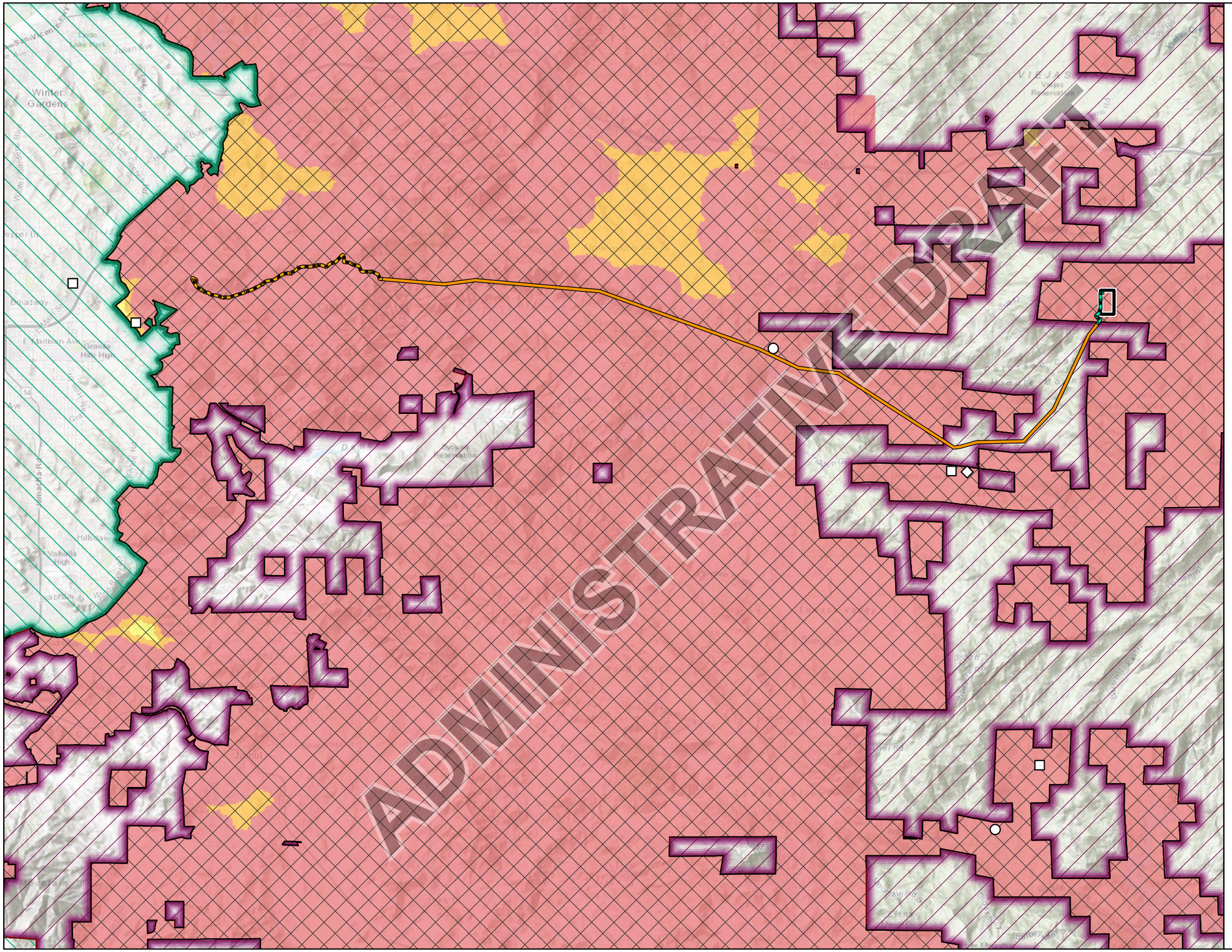


Figure 3.21-2:
Fire Hazard Severity Zones and Fire Protection Responsibility Areas

Suncrest
230 Kilovolt Loop-In Project

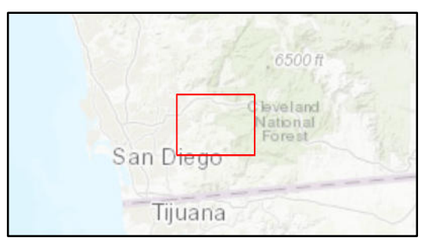
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 1-Mile Buffer

Fire Protection Responsibility Areas

- Federal Responsibility Area (FRA)
- Local Responsibility Area (LRA)
- State Responsibility Area (SRA)

Fire Hazard Severity Zones in SRA

- Very High
- High
- Moderate



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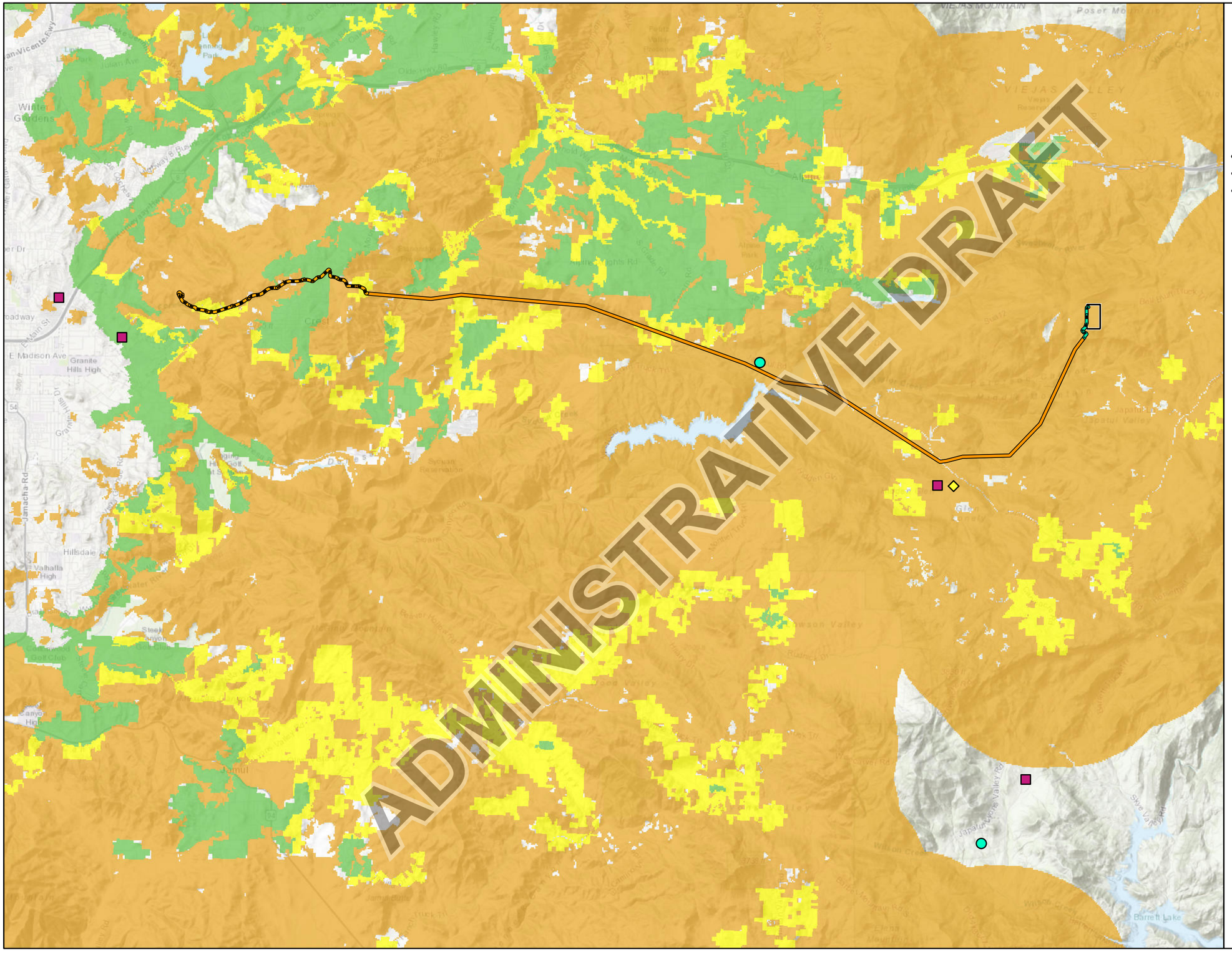

Figure 3.21-3:
Wildland Urban Interface

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation

Wildland-Urban Interface (WUI)

- Influence Zone
- Interface Zone
- Intermix Zone

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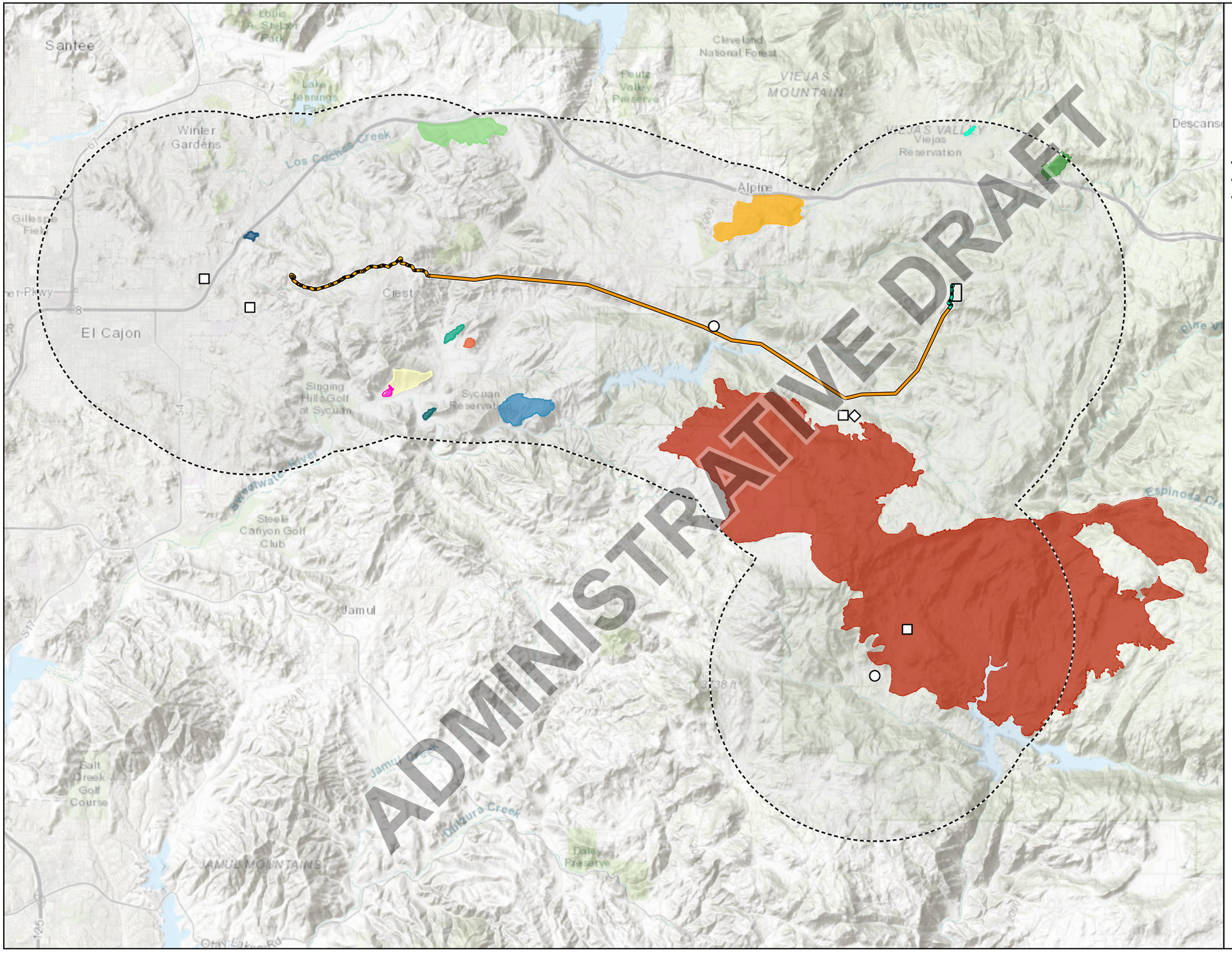

Figure 3.21-4:
Historic Fire Occurrence

Suncrest
230 Kilovolt Loop-In Project

- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 3-Mile Buffer

Historic Fires

- 2022 Harbison 2 Fire
- 2021 Bambi Fire
- 2021 Road Fire
- 2020 Valley Fire
- 2019 Dehesa 11 Fire
- 2019 Dehesa 8 Fire
- 2019 Vista 5 Fire
- 2018 West Fire
- 2017 Jennings 2 Fire
- 2017 Sloane Fire
- 2017 Greenfield Fire
- 2017 Dehesa 5 Fire

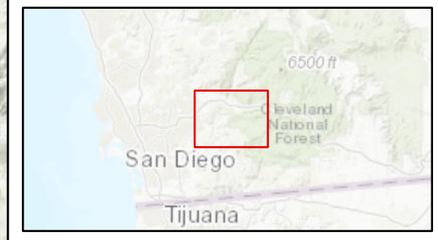

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Table 3.21-3: Historic Fire Occurrence within 3 Miles of the Proposed Project

Fire	Year	Approximate Distance from the Proposed Project (miles)	Approximate Area Burned (acres)	Cause of Fire
Proposed 230 kV OH Segment, Proposed 230 kV UG Eastern Segment, and Existing Suncrest Substation				
Harbison 2 Fire	2022	0.84	26.86	Equipment Use
Bambi Fire	2021	3.05	7.52	Campfire
Road Fire	2021	2.82	83.56	Equipment Use
Valley Fire	2020	0.51	16,389.81	Unknown/Unidentified
Dehesa 11 Fire	2019	2.10	225.65	Unknown/Unidentified
Dehesa 8 Fire	2019	1.73	141.95	Unknown/Unidentified
Vista 5 Fire	2019	1.07	16.70	Unknown/Unidentified
West Fire	2018	1.58	505.39	Equipment Use
Sloane Fire	2017	2.41	13.93	Miscellaneous
Proposed 230 kV UG Western Segment				
Dehesa 5 Fire	2017	2.12	12.25	Unknown/Unidentified
Greenfield Fire	2017	0.98	13.02	Unknown/Unidentified
Jennings 2 Fire	2017	2.20	332.58	Vehicle

Source: CAL FIRE 2025

3.21.1.5 Spread Rate and Flame Length

Section 5.20.4.2 of the CPUC Guidelines requires fire behavior modeling to support the analysis of wildfire risk. To meet this requirement, a wildfire analysis was conducted using FlamMap, a fire analysis desktop application that simulates potential fire behavior characteristics such as spread rate, flame length, fireline intensity, and conditional burn possibilities under constant environmental conditions (USFS 2025).

The FlamMap application includes inputs for the following:

- 20-foot wind speed (mph),[2]
- 20-foot wind direction (degrees),[3]
- 1-hour dead fuel moisture content (percent),[4]
- 10-hour dead fuel moisture content (percent), and

[2] This is the speed that is measured 20 feet above any fuel or obstruction (National Wildfire Coordinating Group [NWCG] 2025).
[3] This is the direction that is measured 20 feet above any fuel or obstruction.
[4] Dead fuel moisture is the moisture content of dead organic fuels (Northern California Geographic Coordination Center 2025). Dead fuels can be divided into three size classes: 1 hour (flashy fuels), 10 hour (0.5-inch diameter), and 100 hour (3-inch diameter). In general, the larger fuels take longer to absorb or lose moisture (USFS 2005).

- 100-hour dead fuel moisture content (percent).

For the Proposed Project, the worst-case scenario was modeled using the dead fuel moisture content values and live fuel moisture contents from the Scott Burgan Fuel Model, as follows:

- 1-hour dead fuel moisture content: 3 percent
- 10-hour dead fuel moisture content: 4 percent
- 100-hour dead fuel moisture content: 5 percent
- live herbaceous: 30 percent
- live woody: 60 percent

Outputs from this modeling are shown in Attachment 3.21-A: Wildfire Modeling Report. These results indicate that the Proposed Project would cross areas where the rate of spread has the potential to exceed 100 feet per minute during both 8-mph easterly winds and 13-mph southwesterly winds. In addition, the Proposed Project would cross areas where the flame length can reach up to 20 feet during 8-mph easterly winds and up to 25 feet during 13-mph southwesterly winds. The predicted rates of spread and flame lengths in the Proposed Project Area are expected to be high given the existing conditions in the Proposed Project Area, including the dominant Scott Burgan Fuel Model fuel types, climate, and topography; CPUC and CAL FIRE designations; and wildfire history in the Proposed Project Area.

3.21.1.6 Values at Risk

Section 5.20.1.4 of the CPUC Guidelines requires identification of "values at risk along the proposed alignment. Values at risk may include structures, improvements, rare habitat, other values at risk, (including utility-owned infrastructure) within 1,000 feet of the project" (CPUC 2019). The primary values at risk along the Proposed Project route include WUIs, nearby residential communities, existing electrical facilities, and critical habitat.

The proposed 230 kV UG segment would cross both Interface Zones and Intermix Zones, as well as non-WUI vegetated locations designated as no housing and low and very low housing density. The proposed 230 kV OH segment would cross the Intermix Zone, as well as non-WUI vegetated locations designated as no housing and very low housing density. SDG&E's existing Suncrest Substation would be in the Intermix Zone. The proposed Hospital Staging Yard would be in a non-vegetation location designated as medium- and high-density housing. The proposed Greenfield Staging Yard would be located in the Interface Zone. The proposed High Glen Staging Yard and proposed High Glen Fly Yard would be in the Intermix Zone. The proposed Sweetwater Staging/Fly Yard, proposed Lyons Valley Staging/Fly Yard, and proposed Swat Staging Yard would be located in non-WUI vegetated locations designated as no housing.

The proposed 230 kV western UG segment would cross the unincorporated community of Crest in San Diego County. As depicted in Attachment 3.21-B: Structures within 1,000 Feet of the Proposed Project, approximately 182 residential homes (primarily composed of wood) are located within 1,000 feet of the proposed 230 kV western UG segment. The proposed 230 kV OH segment would cross the unincorporated communities of Harbison Canyon and Alpine in San Diego County. Approximately 87 residential homes (primarily composed of wood) are located within 1,000 feet of the proposed 230 kV OH segment. Approximately 103 residential

homes (primarily composed of wood), four hospitals, and one place of worship are within 1,000 feet of the proposed Hospital Staging Yard. Approximately 120 residential homes (primarily composed of wood), one day care center, and three schools are within 1,000 feet of the proposed Greenfield Staging Yard. Approximately six residential homes (primarily composed of wood) are within 1,000 feet of the proposed High Glen Staging Yard and proposed High Glen Fly Yard. Attachment 3.21-B: Structures within 1,000 Feet of the Proposed Project identifies the existing structures that would be located within 1,000 feet of the Proposed Project.

The following existing transmission lines are located in the Proposed Project Area:

- SDG&E 500 kV transmission line (Sunrise Powerlink),
- SDG&E 69 kV transmission line (Transmission Line 625), and
- SDG&E transmission corridor.

The Proposed Project would be in the vicinity of the following critical habitat areas:

- approximately 0.8 mile of U.S. Fish and Wildlife Service- (USFWS-) designated critical habitat for arroyo toad (*Anaxyrus californicus*), which is associated with Taylor Creek and the Sweetwater River along the eastern portion of Loveland Reservoir; and

- approximately 3.6 miles of USFWS-designated critical habitat for Hermes copper butterfly (*Lycaena Hermes*), which overlaps the survey area at the following locations:

  - along La Cresta Road,
  - within the proposed Sweetwater Staging/Fly Yard,
  - within the proposed High Glen Staging Yard,
  - within the proposed High Glen Fly Yard,
  - within Sweetwater Authority lands northeast of Loveland Reservoir,
  - within the proposed Swat Staging Yard,
  - within the proposed Lyons Valley Staging/Fly Yard,
  - within Cleveland National Forest (CNF) lands along Japatul Road, and
  - in the vicinity of the existing Suncrest Substation.

3.21.1.7 Evacuation Routes

As described in Section 6 Evacuation Routes in Attachment 3.21-A: Wildfire Modeling Report, the Safety Element of the San Diego County General Plan identifies the potential evacuation routes throughout the county. Interstate (I-) 8, Greenfield Drive, La Cresta Road, Mountain View Road, Harbison Canyon Road, South Grade Road, Dehesa Road, Tavern Road, and Japatul Road are all identified as potential evacuation routes within 1 mile of the Proposed Project. These routes are depicted in Figure 12: Evacuation Routes within One Mile of the Proposed Project in Attachment 3.21-A: Wildfire Modeling Report. In addition, El Cajon Boulevard/Main Street and 2nd Street are major transportation routes in the City of El Cajon with the potential to serve as evacuation routes. Numerous public roads that lack a secondary point of access or exit are located within 1,000 feet of the Proposed Project, as shown in Attachment A: Values at Risk within 1,000 Feet of the Proposed Project in Attachment 3.21-A: Wildfire Modeling Report.

3.21.1.7.1 Unincorporated Community of Alpine Emergency Operations and Evacuation Routes

The County of San Diego's (County's) Alpine Evacuation and Protection Plan, which describes emergency response plans and procedures for the unincorporated community of Alpine in San Diego County, does not include specific evacuation routes (County of San Diego 2006). Alpine communicates evacuation information with the San Diego County Sheriff's Department, responding deputies, San Diego County Fire Department personnel and the sergeant on duty. In the event of a larger critical incident, the San Diego County Sheriff's Department may activate and staff the Department Operations Center to centrally coordinate and manage the incident. The County may activate its County Emergency Operations Center, which is independent from the Department Operations Center.

The San Diego County Sheriff's Department, which provides law enforcement services to the Alpine community, has an Alpine Substation office location in the Alpine Creek Shopping Center. The San Diego County Sheriff's Department developed the Alpine Substation Tactical Evacuation Plan for use in the event of an evacuation situation. The Alpine Substation Tactical Evacuation Plan would be utilized by the on-duty deputies and/or supervisor to implement security, traffic and crowd control, tactical communication, vehicle access, evacuation warnings, and ingress and egress routes for emergency vehicles.

Although the Alpine Evacuation and Protection Plan does not identify specific evacuation routes, major roadways in Alpine near the Proposed Project that could be used as potential evacuation routes include the following:

- Dehesa Road runs east/west and connects to the middle section of the proposed 230 kV OH segment immediately south of the unincorporated community of Alpine. To the east, this road connects with Tavern Road and Japatul Road, which are also evacuation routes. To the west, this road leads to eastern El Cajon.

- Tavern Road runs north/south and connects to the middle section of the proposed 230 kV OH segment immediately south of Alpine. To the north, this road leads to Alpine and I-8.

- Japatul Road runs northwest/southeast and connects along the middle and eastern portions of the Proposed 230 kV OH Segment in four spots along the Proposed Project route. The High Glen Staging Yard and the High Glen Fly Yard are located approximately 950 feet and 650 feet from Japatul Road, respectively. To the southeast, this road connects with Japatul Valley Road.

These potential evacuation routes are depicted in Figure 12: Evacuation Routes within One Mile of the Proposed Project in Attachment 3.21-A: Wildfire Modeling Report.

3.21.1.7.2 Evacuation Routes Outside of Alpine

Other major roadways that could be used as potential evacuation routes include the following:

- La Cresta Road runs east/west and connects to the western section of the proposed 230 kV western UG segment. To the west, this road intersects with Greenfield Drive, which leads to I-8.

- East Main Street runs southwest/northeast and is directly adjacent to Hospital Staging Yard. East Main Street leads to multiple other roads to the north, south, and west, including I-8.

- Greenfield Drive runs west/southeast and is directly adjacent to the Granite Hills Staging Yard. To the northwest, this road connects to I-8.

- Mountain View Road runs northeast/southwest and connects to the eastern portion of the proposed 230 kV western UG segment. To the south, this road leads toward the town of Harbison Canyon; to the north, there are connecting roads that lead north to I-8.

- Harbison Canyon Drive runs north/south and connects to the western section of the proposed 230 kV OH segment. To the south, this road eventually turns into Dehesa Road, which eventually leads to eastern El Cajon.

- Lyons Valley Road runs southwest/northeast and is directly adjacent to the Swat Staging Yard and Lyons Valley Staging/Fly Yard. To the northwest, this road eventually connects with I-8.

These potential evacuation routes are depicted in Figure 12: Evacuation Routes within One Mile of the Proposed Project in Attachment 3.21-A: Wildfire Modeling Report.

3.21.2 Regulatory Setting

3.21.2.1 Federal

3.21.2.1.1 United States Forest Service Special Use Permit Requirements

A special use authorization is required for any of the following:

- to occupy, use, or build on National Forest System (NFS) land for personal or business purposes, whether the duration is temporary or long term;
- if there is a fee being charged or if income is derived from the use; or
- if an activity on NFS land involves individuals or organization with 75 or more participants or spectators (U.S. Department of Agriculture [USDA] 2025).

Permit holders are required to follow all relevant federal, state, county, and local laws and regulations; keep the right-of-way (ROW) clear of vegetation that could cause fires; and develop a Fire Control Plan. Permit holders are responsible for protecting federal lands from damage and are liable for any harm caused, including the cost of fire suppression. Because power lines are considered a high-risk use under USFS rules (36 Code of Federal Regulations

[CFR] 251.56[d][2]), strict liability standards apply; the USFS, with help from the U.S. Justice Department, would seek compensation for damages.

The USFS has also adopted California Public Resources Code (PRC) Sections 4292 and 4293, by Regional Forester Order, which incorporate the power line clearing requirements established by CAL FIRE and are described in more detail in Section 3.21.2.2.5 California Public Resources Code Sections 4292 and 4293. The rules established by CPUC General Order (GO) 95 would also apply to the permittee. These requirements would also apply to the Proposed Project.

3.21.2.1.2 Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy, originally created in 1995 and later revised in 2001 and 2009, was developed by the NWCG, which is a coalition of federal agencies that ensures consistent fire management practices across federal lands. A key aspect of the policy is its recognition of fire as a vital natural process that supports the health and function of ecosystems. The Federal Wildland Fire Management Policy is founded on the following guiding principles, which were established in the 2001 updated policy document:

- Firefighter and public safety is the first priority in every fire-management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire Management Plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire-management activities.
- Fire-management programs and activities are economically viable, based on values to be protected, costs, and land and resource management objectives.
- Fire Management Plans and activities are based on the best available science.
- Fire Management Plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal wildland fire management agencies is an ongoing objective (U.S. Department of the Interior [DOI] 2009).

This policy would apply to the Proposed Project.

3.21.2.1.3 United States Forest Service Project Activity Level System

Developed and implemented in the early 2000s by the USFS, the Project Activity Level (PAL) System is used to regulate industrial activities, including vegetation management and timber harvesting on national forest lands. PALs are typically determined using weather data and regulate industrial activity operating hours, based on the daily fire danger conditions. The PAL System ensures fire prevention measures are implemented—on any project or contract involving equipment or activities that have a fire potential—through permits or agreements with the USFS. The PAL System would apply to the Proposed Project.

3.21.2.1.4 National Fire Plan

The National Fire Plan (NFP) was a presidential directive from August 2000. The NFP directed the Secretaries of Agriculture and the Interior to develop a response to severe wildland fires, reduce fire impacts on rural communities, and plan for sufficient firefighting capacity in the future (U.S. DOI and USFS 2002). As a result, Congress mandated implementation of the NFP, and it became an important tool for long-term wildfire mitigation planning at the federal level.

The NFP emphasizes cooperation and collaboration with other federal agencies, states, counties, local governments, tribes, and other service providers. The USFS, USFWS, Bureau of Indian Affairs, Bureau of Land Management, and National Park Service participate in the NFP by using the National Plan Operations and Reporting System to plan and report accomplishments. The NFP is organized into the following major sections:

- Firefighting,
- Rehabilitation and Restoration,
- Hazardous Fuel Reduction,
- Forest Health Management, and
- Rural and Community Assistance.

This plan would apply to the Proposed Project.

3.21.2.1.5 United States Code

Title 43, Chapter 35, Subchapter V, Section 1772 requires that the Secretaries of the Interior and Secretaries of Agriculture provide owners and operators of electric transmission and distribution facilities that hold ROWs with the option to prepare a plan that describes the vegetation management, inspection, and O&M methods that may be used to comply with all applicable laws. This includes fire safety requirements and reliability standards established by the Electric Reliability Organization. The plan must include schedules for the applicable owner or operator to notify the secretary of concern about routine and major maintenance, as well as to request approval from the secretary concerned about undertaking major maintenance. The plan must also describe processes for identifying changes in conditions and modifying the approved plan, if necessary (U.S. Code [U.S.C.] 2025). This code would apply to the Proposed Project.

3.21.2.2 State

3.21.2.2.1 California Public Utilities Commission Standards

General Order 95

CPUC GO 95 applies to construction and reconstruction of overhead electric lines in California and contains policies that would apply to the Proposed Project. The replacement of poles, towers, or other structures is considered reconstruction and requires adherence to all strength and clearance requirements of this order. Section 35 of GO 95 covers all aspects of design, construction, and O&M of electrical power lines, as well as fire safety hazards. The CPUC has

promulgated various rules to implement the fire safety requirements of GO 95, including the following:

- Rule 18A, which requires that utility companies place a high priority on the correction of significant fire hazards in high fire threat areas of California and that each utility company must establish an auditable maintenance program;
- Rule 31.1, which generally requires that overhead electrical lines be designed, constructed, and maintained in accordance with accepted good practices for the given conditions known at the time;
- Rules 31.2, 80.1A, and 90.1B, which set the minimum frequency for inspections of aerial communication facilities located in close proximity to power lines in high fire threat areas throughout California;
- Rule 35, Table 1, Case 14, which requires increased radial clearances between bare-line conductors and vegetation in high fire threat areas of Southern California;
- Rule 38, which establishes minimum vertical, horizontal, and radial clearances of wires from other wires;
- Rule 43.2.A.2, which requires that for lines located within CPUC Tier 2 or Tier 3 HFTDs, the wind loads required in Rule 43.2.A.1 must be multiplied by a wind load factor of 1.1;
- Rule 48.2, which requires the strength of steel structures and components for tubular steel pole (TSP) structures to be designed using American Society of Civil Engineers 48-11; and
- Appendix E, which authorizes increased time-of-trim clearances between bare-line conductors and vegetation in high fire threat areas of Southern California (CPUC 2024).

General Order 165

GO 165 establishes requirements for the inspection of electric distribution and transmission facilities that are not contained within a substation. Utilities must perform “patrol” inspections, which are defined as simple visual inspections of utility equipment and structures that are designed to identify obvious structural problems and hazards; these inspections must occur at least once per year for each piece of equipment and structure. “Detailed” inspections, in which individual pieces of equipment and structures are carefully examined, are required every 5 years for all overhead conductor and cables, transformers, switching/protective devices, and regulators/capacitors. By July 1 of each year, each utility subject to GO 165 must submit an annual report of its inspections for the previous year under penalty of perjury. GO 165 would apply to the Proposed Project.

Appendix A, Table 1 of GO 165 also requires more frequent patrol inspections of overhead power line facilities in rural, high fire threat areas of Southern California (CPUC 2017).

General Order 166

GO 166 applies to all electric utilities subject to the jurisdiction of the CPUC. The standards presented in this order require that utility companies outline a plan to mitigate power line fires when wind conditions exceed the structural design standards of the line during a Red Flag Warning in a high fire threat area. Fire Prevention Plans (FPPs) created by utility companies are required to identify specific parts of the utility's service territory where fire-exacerbating conditions may occur simultaneously. As GO 166 would apply to the Proposed Project, specific FPPs implemented to comply with GO 166 are described in Section 3.21.2.4 Applicable Mitigation Programs. Fire mitigation planning and reporting requirements are outlined in the following standards of GO 166:

- Standard 1.E requires each electric utility in Southern California to develop and submit a plan to reduce the risk of fire ignitions by overhead facilities in high fire threat areas during extreme fire weather events.

- Standard 11 requires that utilities report annually to the CPUC regarding compliance with GO 166 (CPUC 2021b).

3.21.2.2.2 California Code of Regulations

Title 8, Section 5194 Hazard Communication

The Division of Occupational Safety and Health (Cal/OSHA) in the California Department of Industrial Relations protects workers and the public from safety hazards. Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations. These regulations concern the use of hazardous materials in the workplace, including preparation of emergency action and FPPs.

Cal/OSHA also enforces hazard communication program regulations. Cal/OSHA standards are generally more stringent than federal regulations. Construction workers and operational employees associated with the Proposed Project would be subject to these requirements (Westlaw 2025a).

Title 14, Sections 1250 to 1258

Title 14 California Code of Regulations (Cal. Code Regs.) Sections 1250 to 1258 provide clarification for when and where the electric pole and tower firebreak clearance standards and electric conductor clearance standards apply, as outlined in California PRC Sections 4292 to 4296. Title 14 Cal. Code Regs. Sections 1252 to 1258 are summarized as follows:

- Section 1252 states that the Director of CAL FIRE will apply PRC Sections 4292 to 4296 in any mountainous land, forest-covered land, brush-covered land, or grass-covered land within SRAs unless specifically exempted by Title 14 Cal. Code Regs. Sections 1255 and 1257.

- Section 1253 states that the minimum firebreak and clearance provisions of PRC Sections 4292 to 4296 are applicable during CAL FIRE's declared fire season for a

respective county. The Director of CAL FIRE will post the declaration on the CAL FIRE website.

- Section 1254 specifies that the firebreak clearances required by PRC Section 4292 are applicable within an imaginary cylindroidal space of 10 feet measured horizontally from the outer circumference of the specified pole or tower on which a switch, fuse, transformer, or lightning arrester is attached. The clearance space is applicable to dead-end and corner poles unless the pole or tower is exempt from minimum clearance requirements by provisions of Title 14 Cal. Code Regs. Section 1255 or PRC Section 4296. Flammable vegetation and materials located wholly or partially within the firebreak space will be removed according to the height and distance specifications in Section 1254.

- Section 1255 describes the conditions for which minimum clearance provisions of PRC Section 4292 are not required around poles and towers, including line junction, corner, and dead-end poles and towers.

- Section 1256 states that the minimum clearance required by PRC Section 4293 will be maintained with the specified distances measured at a right angle to the conductor axis at any location outward throughout an arc of 360 degrees. Minimum clearance includes any position through which the conductor may move, considering the size and material of the conductor and any position through which the vegetation may sway.

- Section 1257 outlines conditions when conductors are exempt from the minimum clearance provisions of PRC Section 4293 that are applicable in SRAs.

- Section 1258 states that when electric conductors and subordinate elements are fastened to living, sound trees (commonly referred to as tree lines), the requirements of PRC Sections 4292 and 4293 will apply the same as to a pole or tower line (Westlaw 2025b).

These sections are relevant to the Proposed Project.

3.21.2.2.3 California Public Utilities Code Division 4.1, Chapter 6, Sections 8385 to 8389

Chapter 6, Wildfire Mitigation was added to Division 4.1 of the California Public Utilities Code in 2016. Sections 8385 to 8389 of the chapter establish wildfire mitigation requirements for privately and publicly owned utility companies. The chapter mandates that each electrical corporation constructs, maintains, and operates its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment. Each electrical corporation is required annually to prepare and submit a Wildfire Mitigation Plan (WMP) to the CPUC's Wildfire Safety Division (WSD) for review and approval. The WMPs are required to cover at least a 3-year period. As of 2021, the WSD transitioned to the Office of Energy Infrastructure and Safety. Furthermore, Chapter 6 of the California Public Utilities Code outlines requirements for the qualifications of electrical line clearance tree trimmers (California Legislative Information 2016). The described sections of this code are relevant to the Proposed Project.

3.21.2.2.4 California Health and Safety Code Section 13009

Section 13009 of the California Health and Safety Code permits CAL FIRE to file civil actions to recover fire suppression costs from a party who causes a fire either negligently or in violation of a law. CAL FIRE established a Civil Cost Recovery Program to satisfy the statute's intent to assign financial responsibility to culpable parties and to prevent fires through deterrence. The plan does not contain policies relevant to the Proposed Project.

3.21.2.2.5 California Public Resources Code Sections 4292 and 4293

Section 4292 of the California PRC states the following policies, which would apply to the Proposed Project:

> "[A]ny person that owns, controls, operates, or maintains any electrical transmission or distribution line … shall, during such times and in such areas as are determined to be necessary by the director or the agency, has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightening arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such a pole or tower."

PRC Section 4293 states the following:

> "Any person that owns, controls, operates, or maintains any electrical transmission or distribution line in any mountainous, forest-covered, or grass-covered land must, during times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for fire protection of such areas, maintain a set clearance in all directions between all vegetation and conductors that are carrying electric current. Such distances must be great enough to allow the required clearance at any position of the wire. In addition, trees that are dead, rotten, or weakened which are leaning toward the line or may fall on the line must be felled, cut, or trimmed."

3.21.2.2.6 National Weather Service Red Flag Fire Warning and Weather Watches

Like PRC Sections 4292 and 4293, Red Flag Warnings and fire weather watches aim to prevent fire events and reduce the potential for substantial damage. When extreme fire weather or behavior is present or predicted in an area, a Red Flag Warning or fire weather watch may be issued to advise local fire agencies that these conditions are present. The National Weather Service issues Red Flag Warnings and fire weather watches, and CAL FIRE has provided safety recommendations for preventing fires, including clearing and removing vegetation, as well as ensuring the proper use of equipment (National Weather Service 2025a). This plan does not contain policies relevant to the Proposed Project; however, the Red Flag Warnings and fire weather watches overseen by the National Weather Service would apply to the Proposed Project.

3.21.2.2.7 CAL FIRE Strategic Plan 2024

The CAL FIRE Strategic Plan 2024 establishes updated goals and objectives for reducing wildfire risk and improving resilience throughout California. The plan addresses the state's growing fire-related challenges by outlining actions that support wildfire prevention, emergency response, and natural resource management. It emphasizes collaboration among local, state,

federal, tribal, and private entities to create fire-adapted communities and healthier, more resilient landscapes.

The 2024 plan is organized around five primary goals that focus on enhancing operational capabilities, supporting workforce development, improving internal systems and communication, modernizing infrastructure, and expanding the use of technology. An annual action planning process is included to support implementation and ensure accountability; this process identifies key priorities each year and uses performance metrics to monitor progress. The CAL FIRE Strategic Plan 2024 will serve as a guide for CAL FIRE's efforts over the next several years (CAL FIRE 2024a). The plan does not contain policies relevant to the Proposed Project.

3.21.2.2.8 Power Line Fire Prevention Field Guide 2021 Edition

CAL FIRE, SDG&E, Pacific Gas and Electric Company, Southern California Edison, and other California electric utilities have mutually developed a comprehensive field guide for their personnel. Its purpose is to provide information and guidance to the personnel of the fire service agencies and electrical operators for minimum uniform application within the areas of their respective jurisdiction and franchise responsibilities. In addition to the safety of the public, the guide details fire hazard reduction maintenance procedures for the safety of conductors and certain hardware (CAL FIRE 2021). The plan does not contain policies relevant to the Proposed Project.

3.21.2.3 Local

3.21.2.3.1 County of San Diego

San Diego County General Plan

The San Diego County General Plan lists the following goals and policy concerning wildfire risk and mitigation (County of San Diego 2011):

- **Goal S-4: Minimize Fire Hazards.** Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.

- **Policy S-4.7: Fire Resistant Construction.** Require all new, remodeled, or rebuilt structures to meet current ignition resistance construction codes and establish and enforce reasonable and prudent standards that support retrofitting of existing structures in high fire hazard areas.

- **Goal S-5: Managed Fuel Loads.** Manage fuel loads, including ornamental and combustible vegetation.

The plan does not contain policies relevant to the Proposed Project.

Alpine Community Plan

The Draft Alpine Community Plan was reviewed and no polices that are relevant to wildfire risk and mitigation and the Proposed Project were identified.

County of San Diego Alpine Evacuation and Protection Plan

The County's Alpine Evacuation and Protection Plan was published in 2006 and outlines various community protection and evacuation plans, mitigation strategies, response plans, and emergency services for the unincorporated community of Alpine. The Alpine Evacuation and Protection Plan details the following information:

- a community overview and history of wildfires;
- mitigation strategies;
- community protection and evacuation plans;
- response plans and resources for fire agencies, law enforcement, animal services, mass casualty, and medical, and emergency services;
- shelters and fire safe zones;
- fire protection by geographic sub-region; and
- a vegetation management program.

The plan does not contain policies relevant to the Proposed Project.

Community Wildfire Protection Plans

The San Diego County Community Wildfire Protection Plan (CWPP) is regional in nature; it covers all of San Diego County and contains the blueprint for wildfire preparedness at the neighborhood level. The CWPP was developed collaboratively by citizens and federal, state, and local management agencies. It contains the following key goals:

- align with San Diego County Fire Protection District/CAL FIRE's cohesive pre-fire strategies;
- identify and prioritize areas for hazardous fuel reduction treatment;
- recommend treatment types and methodologies that will protect and prepare the community; and
- recommend measures to increase structural hardening throughout the area addressed by the CWPP.

The San Diego County CWPP also identifies current conditions and lays out future plans for important wildfire mitigation mechanisms, such as interagency collaboration, community engagement and education, structural hardening, defensible space, fuels treatment, and evacuation planning (Fire Safe Council of San Diego County 2019).

The Proposed Project would also cross the jurisdiction of two community-specific CWPPs: the Crest CWPP and Alpine/Viejas CWPP. Both plans contain the same goals and outline the same wildfire mitigation mechanisms as the San Diego County CWPP, with the information in each plan being specific to each community.

The plan does not contain policies that would apply to the Proposed Project.

County of San Diego Code of Regulatory Ordinances

Title 6, Division 8, Chapter 4: Defensible Space for Fire Protection finds that the accumulation of combustible vegetation; dead, dying, or diseased trees; green waste; or rubbish on private

property creates a fire hazard that may be injurious to the health, safety, and general welfare of the public (County of San Diego 2025). Section 68.404 of this ordinance defines required defensible space distances for improvements, work done along roads and driveways, and liquid petroleum gas tanks or containers. In addition to these required buffers, the Fire Code Official may determine that additional defensible space is needed beyond what is outlined in this section to protect property or the health, safety, and welfare of nearby residents. Section 68.405 discusses permitted methods of combustible vegetation removal; re-planting requirements; and compliance with federal, state, and local laws and regulations throughout the process of vegetation removal. The policies from this plan would not apply to the Proposed Project.

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The County's revised Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) was adopted in 2023 and provides strategies and mitigation actions for long-term, cost-effective solutions to reduce natural and human-caused hazard impacts. The MJHMP lists the following goals concerning wildfire risk and mitigation throughout its jurisdiction (County of San Diego 2023a):

- **Goal 1:** Foster safe, sustainable, and thriving environments.
- **Goal 2:** Reduce the possibility of damages and losses to existing assets (such as people, critical facilities/infrastructures, and county-owned facilities).

The goals from this plan are not relevant to the Proposed Project.

CAL FIRE's San Diego Unit 2024 Strategic Fire Plan

CAL FIRE's San Diego Unit 2024 Strategic Fire Plan serves as a regional implementation guide under the broader California Strategic Fire Plan. Interagency collaboration was emphasized during the development of this plan, with input coming from local, state, federal, and tribal agencies. The plan outlines coordinated strategies to reduce wildfire risk and increase community and ecosystem resilience in San Diego and Imperial counties; its key components include risk assessments, identification of assets at risk, enforcement of defensible space regulations, fuels management, and fire prevention education. Battalion-level pre-fire plans are central to project implementation, emphasizing collaboration with local communities, fire safe councils, and other stakeholders.

The plan prioritizes protection of life, property, and natural resources within the WUI, recognizing it as a high-risk area due to the proximity of development to fire-prone vegetation. It promotes compliance with ignition-resistant building standards, enhances public awareness, and supports post-fire recovery. Additionally, the plan incorporates ecological considerations (e.g., the beneficial role of fire in natural systems) and emphasizes vegetation management tailored to varied terrain and climate conditions.

This strategic document is intended as a planning and assessment tool and does not replace environmental review or permitting processes. Instead, it provides a framework for local decision-making and long-term fire resilience across diverse landscapes and communities (CAL FIRE 2024b). The plan does not contain policies relevant to the Proposed Project.

Unified San Diego County Emergency Services Organization and County of San Diego Operational Area Emergency Operations Plan

The Operational Area Emergency Operations Plan (OA EOP) provides a coordinated framework for managing emergencies and disasters across San Diego County and its 18 incorporated cities. Developed by the County and the Unified San Diego County Emergency Services Organization, the OA EOP aligns with the Standardized Emergency Management System and the National Incident Management System, ensuring compliance with state and federal protocols. It defines roles, responsibilities, and lines of authority for all participating jurisdictions and agencies, enabling an integrated, scalable response to a wide range of hazards, including wildfires, earthquakes, terrorism, and mass-casualty incidents.

The OA EOP consists of a Basic Plan and 16 functional annexes that address critical areas such as fire and law enforcement mutual aid, public health, emergency sheltering, environmental health, logistics, evacuation, and emergency public information. It supports resource coordination through the Operational Area Emergency Operations Center and promotes mutual aid, interagency communication, and continuity of operations. Designed for flexibility and periodic updates, the OA EOP serves as both a regional coordination guide and a foundational template for individual jurisdictions to develop or refine their local emergency plans (County of San Diego 2022). The plan does not contain policies relevant to the Proposed Project.

3.21.2.3.2 City of El Cajon

City of El Cajon General Plan

The City of El Cajon General Plan was reviewed, and no goals or policies relevant to the Proposed Project and wildfire were identified.

3.21.2.4 Applicable Mitigation Programs

3.21.2.4.1 San Diego Gas & Electric Company's 2023-2025 Wildfire Mitigation Plan

SDG&E's WMP for 2023 to 2025 builds on successes and incorporates lessons learned from the 2020-2022 WMP cycle. The WMP focuses on infrastructure upgrades, advanced risk modeling, and increased use of technology to enhance safety across high fire threat areas. The key goals and objectives of this plan aim to reduce the risk of catastrophic wildfires and mitigate the impacts of Public Safety Power Shutoffs (PSPSs). SDG&E plans to accomplish this through strategic undergrounding of power lines, installation of covered conductors, and expanded use of drones and artificial intelligence for inspections and early fire detection. Additional initiatives outlined in the WMP include improved emergency preparedness, greater collaboration with local communities and public safety partners, and programs to support vulnerable populations during PSPS events. With the 2023-2025 WMP, SDG&E aims to strengthen system resilience, reduce wildfire threats, and improve safety for the communities it serves (SDG&E 2023). SDG&E submitted a 2026-2028 Base Wildfire Mitigation Plan (Plan) to the Office of Energy Infrastructure on May 2, 2025. The Office of Energy Infrastructure released a draft approval of the 2026-2028 Plan, which was open to public comment until December 24, 2025. It is anticipated that the 2026-2028 Plan would be implemented for the Proposed Project.

3.21.2.4.2 San Diego Gas & Electric Company's Fire Prevention Plan

SDG&E's FPP outlines the organization's efforts to minimize wildfire risk in compliance with regulatory requirements, specifically Standard 1.E of GO 16 and Ordering Paragraphs 2, 4, and 5 of Commission Decision 12-01-032. The FPP was developed in response to the catastrophic 2007 wildfires in San Diego County and reflects a company-wide commitment to wildfire prevention, response, and recovery. The plan covers system design, construction, maintenance, and monitoring practices aimed at reducing ignition risk from SDG&E's infrastructure; it also supports fire prevention education, community outreach, and post-fire recovery efforts. SDG&E's FPP is a living document that guides the organization's ongoing efforts to reduce fire risk, enhance emergency response, and support community resilience across its service territory (SDG&E 2018).

3.21.2.4.3 San Diego Gas & Electric Company's Operations & Maintenance Fire Prevention Plan for the Cleveland National Forest

SDG&E's CNF O&M FPP outlines the organization's efforts to minimize wildfire risk in compliance with regulatory requirements during O&M activities on CNF lands. SDG&E's CNF O&M FPP is designed to describe safe work practices to prevent, control, and extinguish fires when engaged in permitting O&M activities that are subject to project activity level requirements. The plan also implements fire prevention mitigations, which include requirements for tree trimming, routine vegetation management, road maintenance, weed control, and other O&M activities.

3.21.3 Impact Analysis and Mitigation Measures

3.21.3.1 Analysis Methodology

Impacts due to wildfire were determined based on information summarized in Section 3.21.1 Environmental Setting, which was obtained from reviews of the following:

- the dominant Scott Burgan Fuel Model fuel types,
- the CPUC and CAL FIRE designations,
- the predicted rates of spread and flame lengths in the Proposed Project Area,
- wildfire history in the Proposed Project Area,
- the results from the Wildfire Technical Report, and
- the FlamMap wildfire desktop analysis.

3.21.3.2 Applicant-Proposed Measures

The following applicant-proposed measures (APMs) would be implemented for the Proposed Project:

- **APM FIRE-01: SDG&E FPP.** SDG&E's FPP will be implemented across the entire Project area during construction. It will also be utilized for O&M activities, except on Project areas on the CNF, which will follow SDG&E's CNF O&M FPP. SDG&E's FPP will include the following at a minimum:

  - minimizing sources and implementing operational practices of reducing the risk of ignition;

  - operational practices for reducing the risk of ignition;
  - minimizing fire threats with readiness and awareness;
  - an enhanced vegetation management and clearance program;
  - community outreach and public awareness;
  - coordination with local emergency response providers; and
  - fire suppression and recovery procedures.

- **APM FIRE-02: O&M FPP.** SDG&E's CNF O&M FPP will be implemented throughout the O&M phases of the Project that are located on CNF land. SDG&E's CNF O&M FPP includes the following at a minimum:

  - the purpose and applicability of the plan;
  - the permittee/permittee's agents required actions; and
  - procedures for fire reporting, response, and prevention that include the following:

    - the tools and equipment needed on vehicles and at sites;
    - identification of daily site-specific risk conditions;
    - daily monitoring of the Red Flag Warning system with appropriate restrictions on the types and levels of permissible activity;
    - general state regulations to verify fire prevention and safety;
    - PALs and other measures to reduce the risk of large, damaging wildfires;
    - federal and state laws governing vegetation management;
    - information on how to report a wildfire; and
    - mitigation techniques to implement while metal-cutting, welding, and grinding.

3.21.3.3 Significance Criteria

The thresholds of significance for assessing wildfire impacts come from the California Environmental Quality Act (CEQA) Appendix G Environmental Checklist. For projects located in or near SRAs or lands classified as very high FHSZs, the CEQA Appendix G Environmental Checklist asks if the Proposed Project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan?

- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

- Require the installation or maintenance of associated infrastructure (e.g., roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

3.21.3.4 Impact Analysis

3.21.3.4.1 Impact FIRE-01: If located in or near SRA lands or lands classified as very high FHSZ, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Construction

Less-than-Significant Impact. The majority of the Proposed Project components would be located in an SRA, including the proposed Greenfield Staging Yard, proposed Swat Staging Yard, proposed High Glen Staging Yard, proposed High Glen Fly Yard, proposed Lyons Valley Staging/Fly Yard, and proposed Sweetwater Staging/Fly Yard. The existing Suncrest Substation and the majority of the proposed 230 kV transmission line would be located on lands classified as Very High FHSZs. The proposed Greenfield Staging Yard would be located in an LRA and would not be located in a FHSZ. The proposed Hospital Staging Yard would be located in an LRA and a Very High FHSZ.

Proposed Project construction could potentially interfere with emergency response or emergency evacuation plans if construction vehicles or equipment hinder ingress or egress, alter emergency response times, or prevent the implementation of the emergency response or evacuation plans. As stated in APM FIRE-01, SDG&E would minimize response times in the event of a wildfire by training personnel to efficiently respond to daily weather forecasts. Depending on the weather conditions, trained personnel would be placed on appropriate levels of alert, and the level of system monitoring and system operations would be elevated according to the prevailing weather conditions in the Proposed Project Area. During extreme conditions, such as areas with the highest winds or where the greatest threat of fire exists construction crews would be accompanied by SDG&E wildfire prevention personnel or construction suspended in accordance with the procedures outlined in the FPP to minimize response times and risk of ignition. Additionally, smoke and ignition detection systems would facilitate early detection, reduce response times, and minimize potential consequences for ignitions.

SDG&E operates and utilizes cameras to enhance situational awareness related to wildfire activity, including 35 cameras owned by SDG&E and 87 cameras supported in collaboration with the University of California San Diego; these cameras include static and high-definition pan-tilt-zoom “High Alert SDG&E Cameras.” One existing camera in the Proposed Project Area is located in the community of Crest. The camera faces southwest in the direction of the western terminus of the Proposed Project; however, the camera view does not capture the majority of the Proposed Project alignment.

The High Alert SDG&E Camera network provides real-time, mountaintop monitoring that enables quicker wildfire detection and significantly reduces wildfire response times, supporting CAL FIRE’s Monte Vista Dispatch Center in locating and assessing wildfires during initial response efforts. As described in Section 3.10 Hazards and Hazardous Materials, construction of the Proposed Project components would have a less-than-significant impact on the implementation of an adopted emergency response or evacuation plan. Based on the implementation of APM FIRE-01, impacts to emergency response plans would be less than significant.

There are multiple evacuation routes associated with the Proposed Project's evacuation plan. Mountain View Road, located on the eastern side of the proposed 230 kV western UG segment, is a northeast-bound evacuation route. La Cresta Road, an evacuation route located on the western side of the proposed 230 kV western UG segment, leads to Greenfield Drive and I-8, which is the closest major freeway to the Proposed Project. I-8 is located 1 to 3 miles north of the proposed 230 kV transmission line; however, the proposed Hospital Staging Yard adjacent to I-8 would utilize Greenfield Drive for construction equipment and vehicle access for Proposed Project components and avoid the use of I-8. Therefore, the Proposed Project would not cross or utilize any interstates that could potentially be used as evacuation routes. Additionally, evacuation routes connected to the proposed 230 kV OH segment would include Harbison Canyon Road, Dehesa Road, Tavern Road, and Japatul Road.

On the proposed 230 kV western UG segment, approximately 36 driveways are located along La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive. SDG&E would coordinate with landowners to verify they have ingress and egress to their property at all times, as well provide contingencies, such as extra road plates on site to allow vehicles access in or out in the event of an emergency.

As described in Section 3.16 Public Services, the Proposed Project components would have a less-than-significant impact on service ratios, response times, or other objectives for public services in the area due to lane openings and coordination with local jurisdictions and emergency service providers. Installation of the proposed 230 kV western UG segment would require temporary lane closures, which could impact emergency response plan times. It is anticipated that during construction, one lane would require closure, while the other lane would remain open for two-way controlled traffic. During any road closures, one lane would remain open for two-way controlled traffic, which would allow emergency responders and residents to continue through the Proposed Project Area. However, traffic may be slightly impaired due to lane closures. The temporary closures would be coordinated with the County and emergency service providers through the encroachment permit and traffic control permit processes, and one or more traffic control plans would be implemented as necessary. As discussed in Section 3.18 Transportation, SDG&E would implement MM TRA-01, which requires SDG&E to prepare a Traffic Control Plan and notify emergency service providers prior to the commencement of construction activities that require lane closures. The implementation of MM-TRA-01 would verify that potential changes to emergency services would be minimized and ingress and egress to residences, businesses, roadways, and other areas would be maintained throughout construction. Fire, emergency, and police services currently serve (and would continue to serve) the areas where the new Proposed Project facilities would be located. Based on the acquisition of applicable encroachment permits and the implementation of traffic control measures, the Proposed Project would not conflict with emergency evacuation or response plans. Therefore, conflicts with the San Diego County General Plan Safety Element are not anticipated, and impacts to emergency response plans and evacuation routes would be less than significant.

Operations and Maintenance

No Impact. As described in Section 3.10 Hazards and Hazardous Materials, O&M activities would be conducted in the same manner as they were conducted prior to construction of the Proposed Project. Routine maintenance activities would likely not impair the implementation of

or physically interfere with EOPs due to the small crew size and infrequency of dispatch. O&M of the new underground facilities that would be installed as part of the new transmission line may require temporary lane closures if a repair is required. However, these lane closures would be short in duration (i.e., typically 45 minutes or less) and would not deviate from the maintenance of existing or proposed underground facilities in the area. Total road closure would not be expected and two-way traffic could be returned with short notice for all foreseeable maintenance activities. All required traffic control measures would be implemented in accordance with applicable encroachment permits, and emergency vehicles would be provided access during potential lane closures caused by maintenance activities. APM FIRE-01 would be implemented to prevent significant impacts during O&M activities. APM FIRE-02 would be implemented to prevent significant impacts during O&M activities that occur on CNF land. These FPPs include requirements for inspecting, repairing, and maintaining access roads during O&M work, and they require that roads remain open and passable for emergency use. APM FIRE-01 requires that mobile command trailers and tactical communication trailers are staged in districts located within the HFTD during high-risk fire season. District personnel would be fully trained each year on O&M to verify that units remain effective and functional. Additionally, APM FIRE-02 contains procedural requirements for all O&M activities to cease during changes in weather conditions and during any active fire in the work area until the USFS gives approval that O&M of the Proposed Project can resume or Red Flag warnings have been cancelled. The Proposed Project's O&M activities are not anticipated to interfere with any emergency response plans or evacuation routes. Because the O&M phase would not change any of the baseline conditions for emergency response or evacuation, no impact would occur.

3.21.3.4.2 Impact FIRE-02: If located in or near SRA lands or lands classified as very high FHSZ, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Construction

Less-than-Significant Impact. The majority of the Proposed Project components would be located in an SRA, including the proposed Greenfield Staging Yard, proposed Swat Staging Yard, proposed High Glen Staging Yard, proposed High Glen Fly Yard, proposed Lyons Valley Staging/Fly Yard, and proposed Sweetwater Staging/Fly Yard. The existing Suncrest Substation and the majority of the proposed 230 kV transmission line would be located on lands classified as a Very High FHSZ. The proposed Greenfield Staging Yard would be located in an LRA and would not be located in an FHSZ. The proposed Hospital Staging Yard would be located in an LRA and a Very High FHSZ.

As discussed in Attachment 3.21-A: Wildfire Modeling Report, outputs from the fire model desktop analysis indicate that the elevation along the Proposed Project ranges from 749 to 3,057 feet AMSL. The Proposed Project would also cross areas where the rate of spread has the potential to exceed 100 feet per minute during both 8-mph easterly winds and 13-mph southwesterly winds, which would contribute to the uncontrolled spread of a wildfire. In addition, the Proposed Project would cross areas where the flame length can reach up to 20 feet during 8-mph easterly winds and up to 25 feet during 13-mph southwesterly winds. As discussed in Section 3.8 Geology, Soils, and Paleontological Resources, the topography in the Proposed

Project Area is relatively steep, with slopes ranging from 0 to 108 percent and averaging greater than 31 percent. Therefore, the Proposed Project components would be constructed in a high fire risk area with slopes that could accelerate the spread of wildfire. The majority of the Proposed Project crosses west-facing slopes with residences located on the lower and mid-area of the slopes.

Given the dominant Scott Burgan Fuel Model fuel types (as described in Section 3.21.1.5 Spread Rate and Flame Length) that are located in and along the Proposed Project, the predicted rates of spread and flame length, and the fire history of the area, fires would be likely to occur and potentially difficult to suppress in the event that fuel sources were ignited. As discussed in Section 3.10 Hazards and Hazardous Materials, the Proposed Project would be located within both Tier 2 and Tier 3 HFTDs, which could expose construction personnel to a wildfire during construction. The risk posed to construction personnel would likely come from the inability to avoid or escape wildfire due to the conditions described previously.

APM FIRE-01 would be implemented throughout the construction phase of the Proposed Project to limit exposure to Proposed Project personnel. APM FIRE-01 includes precautionary measures that include training; drills; procedures for fire response, reporting, and prevention; necessary fire prevention equipment; coordination with local and federal fire officials; and identification of daily site-specific risk conditions. In the event that fire conditions threaten public safety or SDG&E facilities, SDG&E would mobilize an appropriate range of resources, including trained fire assets, communications capabilities, data and information collection, and command facilities to address fire threats and confirm the earliest possible recovery from a fire event in the affected communities. Therefore, APM FIRE-01 reduces risk to Proposed Project personnel and the public by ensuring prevention and safety measures in the event of a fire. As a result, the Proposed Project would not expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and impacts would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. The Proposed Project would be unmanned during the majority of the O&M phase and would not include occupied buildings. Any scheduled or routine O&M—including monitoring and maintenance of Proposed Project components and equipment—would comply with safety regulations and procedures in APM FIRE-01 and APM FIRE-02. As wind speeds increase, SDG&E would deploy an increasing number of field crews, troubleshooters, and Wildland Fire Prevention resources to areas with the highest winds and where the greatest threats of fire exist, per APM FIRE-01. These system monitoring and operation activities would minimize the potential for fire ignition during O&M activities.

The TSPs that would support the proposed 230 kV OH segment, as well as the associated conductors, would be designed to withstand extreme wind-loading in accordance with GO 95 Rule 43 and Rule 48. GO 95 provides parameters for design, construction, and O&M of electrical power lines, as well as fire safety hazards. Rule 34 outlines the required strength of conductors, and Rule 48 describes the required strength of steel structures and components. Because the proposed 230 kV OH segment's components would be designed in accordance with GO 95, the potential for fire ignition during severe wind events would be minimized.

Additionally, SDG&E would follow standard fire prevention practices by conducting most O&M activities along existing roads to minimize the risk of igniting vegetation. APM FIRE-01 and APM FIRE-02 include an Enhanced Vegetation Management and Clearance Program under Operational Practices for Reducing the Risk of Ignition. Prior to each fire season, SDG&E requires vegetation management contractors to perform annual training on hazard tree assessments, and a corresponding tree-hazard evaluation is performed for each tree within the HFTD. Any vegetation in the area adjacent to power lines—particularly trees that are tall enough to potentially strike the overhead facilities if the tree were to fall—is trimmed and/or cleared, as necessary, prior to September 1 each year. For poles within the CAL FIRE jurisdiction and that bear these "non-exempt" equipment attachments, SDG&E is required to perform "pole brushing," which consists of clearing all vegetation within a 10-foot radius of the pole. To further reduce potential ignition sources, vegetation management works closely with the Fire Risk Mitigation Team and engineering department to reduce the number of non-exempt power line components by replacing such equipment, where feasible, with exempt equipment, which should also reduce the potential for pole attachments to become an ignition source. This routine maintenance verifies safe vegetation clearances are achieved prior to fire season in order to reduce fire risk and spread. Further, SDG&E would minimize the fire potential for ignition by conducting routine O&M, vegetation trimming, and consistent monitoring. As a result, impacts would be less than significant.

3.21.3.4.3 Impact FIRE-03: If located in or near SRA lands or lands classified as very high FHSZ, would the project require the installation or maintenance of associated infrastructure (e.g., roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Construction

Less-than-Significant Impact. Construction of the Proposed Project would require the installation and maintenance of infrastructure that could potentially exacerbate fire risk. During the construction phase of the Proposed Project, temporary access roads would be built, which would involve sparks from grading in rocky terrain. The grading from access road installation would have the potential to spark a fire. Additionally, the Proposed Project would involve the installation of temporary power or use generators at the staging yards, which may also elevate the risk of wildfire. To provide temporary construction power and a backup power source, portable gas/diesel generators would be used. If a nearby existing overhead distribution system is available, it may be tapped to provide power. For the existing Suncrest Substation, existing telecommunications within the substation boundaries would be modified as needed to accommodate the new equipment additions. For the proposed 230 kV OH segment, optical ground wire (OPGW) cables would be installed to provide fiber optic communication for system protection and control. In addition to the overhead installation, the Proposed Project would also include the installation of fiber optic along the proposed 230 kV UG segments where necessary to maintain system connectivity. Telecommunication cables and associated infrastructure would be part of the OPGW installations. These OPGW installations would occur within the footprint of the overhead and underground segments.

APM FIRE-01 would be implemented to minimize the fire risk associated with the installation of the previously described infrastructure. In the event of a wildfire during construction, the California Utilities Emergency Association would be contacted and would provide emergency response support wherever practicable for electric, petroleum pipeline, telecommunications, natural gas, water, and wastewater utilities. Additionally, APM FIRE-01 would include power line safety measures to minimize wildfire risk, including a Community Fire Safety Program that improves power line safety, and a vegetation management program to keep trees and brush clear of power lines prior to fire season. SDG&E also implements a tree removal program to remove potentially problematic vegetation in order to minimize interference with nearby power lines and facilities during wildfires. As a result, temporary or ongoing environmental impacts resulting from increased fire risk would be less than significant.

Operations and Maintenance

Less-than-Significant Impact. O&M of the Proposed Project would not require the installation of new, expanded, or relocated electrical power or natural gas facilities, nor would it require new, expanded, or relocated telecommunications facilities. However, any maintenance of the Proposed Project would be conducted in accordance with APM FIRE-01 and APM FIRE-02, which would implement operational practices for reducing the risk of ignition, including procedures for system management, quality assurance and control, enhanced vegetation management, coordination with infrastructure providers, and workforce training. APM FIRE-02 would regulate procedures for any pole replacements or pole hole digging, depending on the operating conditions of the area. During elevated operating conditions, pole replacements or pole hole digging would be required on paved roads or improved roads with no vegetation on the roadbed and a designated Fire Patrol;[5] if the pole-replacement or pole-digging activity conducted involves off-road vehicle travel or is on unmaintained roadbeds during elevated operating conditions, personnel would be required to have a designated Fire Patrol, 150 gallons of water, and associated equipment for its use. During extreme operating conditions,[6] pole replacement and pole hole digging would not be permitted, per APM FIRE-02. APM FIRE-02 outlines similar regulations for conductor replacement procedures during O&M activities to verify that fire risk is minimized during infrastructure maintenance. Insulator washing must be conducted on existing access roads with a 1,000-gallon Insulator Wash Rig during normal operating conditions, but, in order to minimize risk, it is not permitted during extreme operating conditions.

Access roads and powerlines would be maintained in a manner consistent with other access roads and powerlines in the surrounding area, of which many exist. The addition of a new powerline and its associated maintenance activities would result in an incremental increase in ignition risk by the virtue of the additional powerlines and roads. However, numerous powerlines are already located in the immediate area and region. The increase in maintenance activities associated with the new facilities would be very small and would occur in conjunction with the existing O&M activities in the area for the existing infrastructure. As a result, impacts would be less than significant.

[5] A designated Fire Patrol is a member of the work crew assigned the responsibilities for fire prevention and fire risk mitigation on the job site.

[6] The criterion for extreme operating conditions is to only do the work if not performing the work creates a greater risk than doing so.

3.21.3.4.4 Impact FIRE-04: If located in or near SRA lands or lands classified as very high FHSZ, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Construction

Less-than-Significant Impact. The proposed 230 kV OH segment would include the installation of poles located near roads and residences, which could cause potential adverse effects related to pole instability if poles are not designed to withstand flooding or landslides. The proposed 230 kV OH segment would cross a County-designated liquefaction area between Poles 31 and 32. As shown in Section 3.8 Geology, Soils, and Paleontological Resources, approximately 1.6 miles (52 percent) of the proposed 230 kV western UG segment would cross areas with high to very high landslide potential, and approximately 0.1 mile (37 percent) of the proposed 230 kV eastern UG segment would cross areas with high to very high landslide potential. Poles 1 through 29, 33, 36 through 47, and 49 through 56 of the proposed 230 kV OH segment would be located on land with high to very high landslide potential. However, most cases of runoff would not lead to residences or properties and would not result in major changes of runoff flow. Poles 1, 9 through 15, 23 through 37, and 44 through 56 would not be located in residential, commercial, or industrial areas; therefore, they would be unlikely to expose people or structures to significant risks such as flooding or landslides. Poles 2, 7 through 8, 16 through 22, and 39 through 43 would be located within 0.25 mile of a residence or commercial building; however, due to the topography of the region, the people and structures near these poles would likely not be at risk. Poles 3 through 6 and 38 would be located within 0.25 mile of a residence or commercial building, and they may potentially be at risk of flooding or landslides due to the area's topography.

Grading would occur at the staging yards and construction work areas as necessary to provide safe travel and level work areas for construction vehicles and equipment. These areas that are denude of vegetation would be more susceptible to landslides, erosion, and runoff during post-fire rain events. As stated in Section 3.11 Hydrology and Water Quality, SDG&E would obtain and comply with the Construction Stormwater General Permit Order 2022-0057-DWQ and implement the measures identified in the required Storm Water Pollution Prevention Plan (SWPPP) to control erosion and runoff and minimize subsequent sedimentation. Temporary disturbance would be relatively small and would not be expected to contribute to post-fire catastrophic land failures. However, if a fire were to occur in the Proposed Project Area that resulted in exposed soil beyond what is described in Chapter 2 Project Description, areas denude of vegetation would be stabilized in accordance with the SWPPP. As a result, construction of the Proposed Project would have a less-than-significant impact to post-fire rain events, including increased runoff, soil instability, or landslides.

Operations and Maintenance

Less-than-Significant Impact. Typical O&M activities would involve routine inspections and preventive maintenance to verify service reliability, as well as emergency work to maintain or restore service. Anticipated O&M activities may include access road maintenance and repair; pole replacement; transmission line repair, replacement, and reconductoring; repair and

replacement of substation components; and vegetation management. As stated in Section 3.11 Hydrology and Water Quality, no additional ground disturbance is anticipated during O&M and the majority of ground that is disturbed during construction would be stabilized with vegetation. Areas that are permanently denude of vegetation are not contiguous and would be relatively small in size. Therefore, impacts regarding ground disturbance are anticipated to be less than significant during O&M activities.

The proposed 230 kV OH segment would cross a portion of the Federal Emergency Management Agency (FEMA) Zone AE along Harbison Canyon Road (FEMA 2025). Zone AE corresponds to a 100-year flood zone that is based on the base flood elevation, as determined by detailed flood studies. No other Proposed Project components would cross a designated FEMA Flood Hazard Zone. Because the proposed 230 kV OH segment would span the relatively narrow area of Zone AE along Harbison Canyon Road, and no permanent structures would be installed within the flood zone, flood exposure to people or structures is not anticipated.

SDG&E has implemented extensive operational programs designed to monitor operational systems closely whenever and wherever the threat of fire is elevated so that, in the event of an ignition, the threats to public safety from fire are quickly abated or mitigated as fully and quickly as possible. These programs include gathering and analyzing the data from SDG&E's extensive weather network. APM FIRE-01 also states that when fire risk is high and a wildland fire occurs, SDG&E may mobilize its available resources (e.g., Wildland Fire resources and/or Industrial Fire Brigade) as the situation dictates to assist in the suppression of the fire and in recovery activities. These resources may also be made available, if requested, to public agencies with responsibility for fire suppression and recovery. These programs contract fire resources that would accompany SDG&E employees conducting Proposed Project maintenance activities and would respond to a medical emergency if needed. As a result, these programs would minimize the risk of exposing people to post-fire hazards during the O&M phase of the Proposed Project. Post-fire hazards, such as landslides, mudslides, or slope instability could occur due to the existing topography; however, because the Proposed Project would not require mass grading to install the poles and only minor grading would be required for the construction of the underground segments, the Proposed Project is not anticipated to substantially exasperate slope instability. As a result, less-than-significant impacts from runoff, post-fire slope instability, or drainage changes would occur during O&M of the Proposed Project.

3.21.4 References

CAL FIRE. 2021. California Power Line Fire Prevention Field Guide. Online. https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/prevention-field-guides/2021-power-line-fire-prevention-field-guide-ada-final_jf_20210125.pdf. Site visited April 2025.

CAL FIRE. 2022. Wildland-Urban Interface Fire Threat. Online. https://services3.arcgis.com/i2dkYWmb4wHvYPda/arcgis/rest/services/cdf_wildland_urban_interface/FeatureServer. Site visited May 2025.

CAL FIRE. 2024a. CAL FIRE Strategic Plan 2024. Online. https://www.paperturn-view.com/cal-fire-communications/cal-fire-strategicplan24-web?pid=ODg8828162&v=2. Site visited April 2025.

CAL FIRE. 2024b. San Diego Unit 2024 Strategic Plan. Online. https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-plan/2024/2024-san-diego-imperial-unit-fire-plan.pdf?rev=06f410e38906443eb6edf36b5d15035b&hash=C6B938145FD37619F902DE6B3B2EF5DB. Site visited April 2025.

CAL FIRE. 2024c. Fire Hazard Severity Zones. Online. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Site visited April 2025.

CAL FIRE. 2025. California Historic Wildfire Perimeters. Online. https://calfire-forestry.maps.arcgis.com/home/item.html?id=c3c10388e3b24cec8a954ba10458039d. Site visited June 2025.

California Legislative Information. 1976a. PRC § 4292. Online. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4292. Site visited April 2025.

California Legislative Information. 1976b. PRC § 4293. Online. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC&sectionNum=4293. Site visited April 2025.

California Legislative Information. 2016. Chapter 6 Wildfire Mitigation. Online. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PUC&division=4.1.&title=&part=&chapter=6.&article=. Site visited April 2025.

California Legislative Information. 2022. HSC § 13009. Online. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=13009. Site visited April 2025.

CFR. 2024. § 2805.22 Special provisions for vegetation management for electric transmission and distribution rights-of-way. Online. https://www.ecfr.gov/current/title-43/subtitle-B/chapter-II/subchapter-B/part-2800/subpart-2805/section-2805.22. Site visited April 2025.

City of San Diego. 2024. Public Facilities, Services, and Safety Element. Online. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_06_public-facilities_july-2024.pdf. Site visited April 2025.

County of San Diego. 2006. Alpine Evacuation and Protection Plan. Online. https://www.sandiegocounty.gov/oes/docs/CPEP_Alpine.pdf. Site visited November 2025.

County of San Diego. 2009. Vegetation In San Diego County Map. Online. https://www.sandiegocounty.gov/content/dam/sdc/sdcfa/documents/gis/map-veg.pdf. Site visited April 2025.

County of San Diego. 2011. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/sdc/pds/generalplan.html#Elements. Site visited April 2025.

County of San Diego. 2022. San Diego County Emergency Operations Plan. Online. https://www.sandiegocounty.gov/content/sdc/oes/emergency_management/oes_jl_oparea.html. Site visited April 2025.

County of San Diego. 2023a. Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). Online. https://www.sandiegocounty.gov/content/dam/sdc/oes/emergency_management/HazMit/2023/MJHMP_SD%20County%20Base%20Plan%202023.pdf. Site visited April 2025.

County of San Diego. 2023b. San Diego County Code of Regulatory Ordinances Title 9, Division 6, Chapter 1: County Fire Code. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-113128. Site visited April 2025.

County of San Diego. 2025. San Diego County Code of Regulatory Ordinances Title 6, Division 8, Chapter 4: Defensible Space for Fire Protection Ordinance. Online. https://codelibrary.amlegal.com/codes/san_diego/latest/sandiego_regs/0-0-0-130500. Site visited April 2025.

CPUC. 2017. General Order No. 165. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K552/209552704.pdf. Site visited April 2025.

CPUC. 2019. Guidelines for Energy Project Applications Requiring CEQA Compliance. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/c/6442463239-ceqa-pre-filing-guidelines-pea-checklist-nov-2019.pdf. Site visited September 2025.

CPUC. 2021a. High Fire-Threat District. Online. https://capuc.maps.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa2. Site visited April 2025.

CPUC. 2021b. General Order No. 166. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M464/K730/464730514.pdf. Site visited April 2025.

CPUC. 2024. General Order No. 95. Online. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M550/K438/550438485.pdf. Site visited April 2025.

Crest Fire Safe Council. 2024. Community Wildfire Protection Plan. Online. https://firesafesdcounty.org/wp-content/uploads/2024/08/FINAL-2024-CWPP-CREST.pdf. Site visited April 2025.

FEMA. 2025. FEMA National Flood Hazard Layer Viewer. Online. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Site visited May 2025.

Fire Safe Council of San Diego County. 2019. Community Wildfire Protection Plan. Online. https://firesafesdcounty.org/wp-content/uploads/2023/09/CA_SanDiego_CNTY_2019.pdf. Site visited April 2025.

International Code Council. 2024. 2022 California Fire Code, Title 24, Part 9 with July 2024 Supplement. Online. https://codes.iccsafe.org/content/CAFC2022P3. Site visited April 2025.

LANDFIRE. 2025. 40 Scott and Burgan Fire Behavior Fuel Models. Online. https://landfire.gov/fuel/fbfm40. Site visited May 2025.

National Weather Service. 2025a. Understanding Wildfire Warnings, Watches, and Behavior. Online. https://www.weather.gov/safety/wildfire-ww. Site visited April 2025.

National Weather Service. 2025b. Mountain and Valley Winds. Online. https://www.weather.gov/safety/wind-mountain-valley. Site visited April 2025.

Northern California Geographic Coordination Center. 2025. Online. https://www. https://gacc.nifc.gov. Site visited April 2025.

NWCG. 2025. Midflame Windspeed. Online. https://www.nwcg.gov/course/ffm/fire-behavior/82-midflame-windspeed. Site visited June 2025.

SDG&E. 2017. Operations & Maintenance Fire Prevention Plan for the Cleveland National Forest. Online. https://ia.cpuc.ca.gov/environment/info/dudek/cnf/20170706_CNF%20PLRP%20OM%20Fire%20Plan_REDACTED.pdf. Site visited August 2025.

SDG&E. 2018. Fire Prevention Plan. Online. https://www.sdge.com/sites/default/files/documents/SDGE_Fire_Prevention_Plan_2018.pdf?nid=3431. Site visited April 2025.

SDG&E. 2023. 2023-2025 Wildfire Mitigation Plan. Online. https://www.sdge.com/2023-wildfire-mitigation-plan. Site visited April 2025.

Southern California Geographic Area Coordination Center. 2025. 100 Hour Dead Fuel Moisture Levles. Online. https://gacc.nifc.gov/oscc/predictive/fuels_fire-danger/usfs_nfdrs/indexhundred.html. Site visited June 2025.

U.S.C. 2025. § 1772 Vegetation management, facility inspection, and operation and maintenance relating to electric transmission and distribution facility rights of way. Online. https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title43-section1772&num=0&edition=prelim. Site visited April 2025.

USDA. 2025. Special Use Permit Application. Online. https://www.fs.usda.gov/working-with-us/contracts-commercial-permits/special-use-permit-application. Site visited July 2025.

U.S. DOI and USFS. 2002. National Fire Plan. Online. https://www.fs.usda.gov/database/budgetoffice/NFP_final32601.pdf. Site visited April 2025.

U.S. DOI. 2009. Guidance for Implementation of Federal Wildland Fire Management Policy. Online. https://www.doi.gov/sites/doi.gov/files/uploads/2009-wfm-guidance-for-implementation.pdf. Site visited September 2025.

U.S. Fire Administration. 2025. What is the WUI? Online. https://www.usfa.fema.gov/wui/what-is-the-wui/. Site visited April 2025.

USFS. 2005. Evaluation of Instruments Used to Measure Fuel Moisture. Online. https://www.fs.usda.gov/t-d/pubs/pdfpubs/pdf05512347/pdf05512347dpi72.pdf. Site visited June 2025.

USFS. 2012. Environmental Assessment: Palomar Mountain Vegetation Treatment Program. Online. https://www.fs.usda.gov/r05/cleveland/projects/archive/33962. Site visited June 2025.

USFS. 2023. Wildland Urban Interface: 2020. Online. https://data-usfs.hub.arcgis.com/documents/7804d89ed1094ccb9aae753228e8d89a/explore. Site visited April 2025.

USFS. 2025. Where humans and forests meet: The rapidly growing wildland-urban interface. Online. https://research.fs.usda.gov/nrs/articles/where-humans-and-forests-meet-rapidly-growing-wildland-urban-interface. Site visited May 2025.

Westlaw. 2025a. § 5194 Hazard Communication. Online. https://govt.westlaw.com/calregs/Document/I4B8F3B125A0F11EC8227000D3A7C4BC3?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default). Site visited April 2025.

Westlaw. 2025b. Article 4 Fire Prevention Standards for Electric Utilities. Online. https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I456774205B4D11EC976B000D3A7C4BC3&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default). Site visited April 2025.

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ATTACHMENT 3.21-A: WILDFIRE MODELING REPORT

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Attachment 3.21-A: Wildfire Modeling Report is included in the Administrative Draft Environmental Impact Report Volume 2.

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ATTACHMENT 3.21-B: STRUCTURES WITHIN 1,000 FEET OF THE PROPOSED PROJECT

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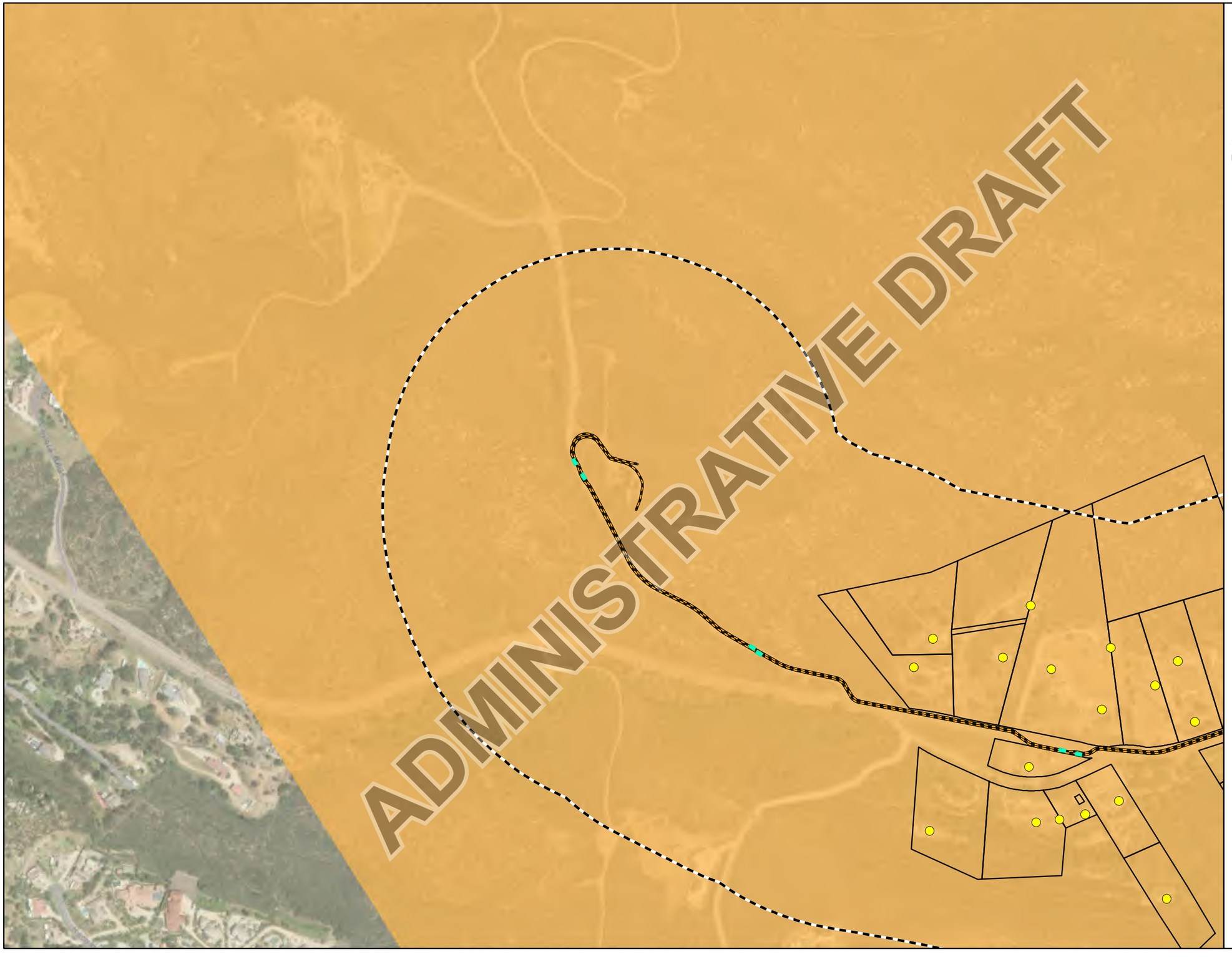


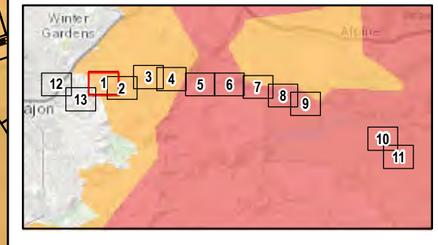
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 1 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- Vault
- Parcel Lines

Existing Structure

- Residence



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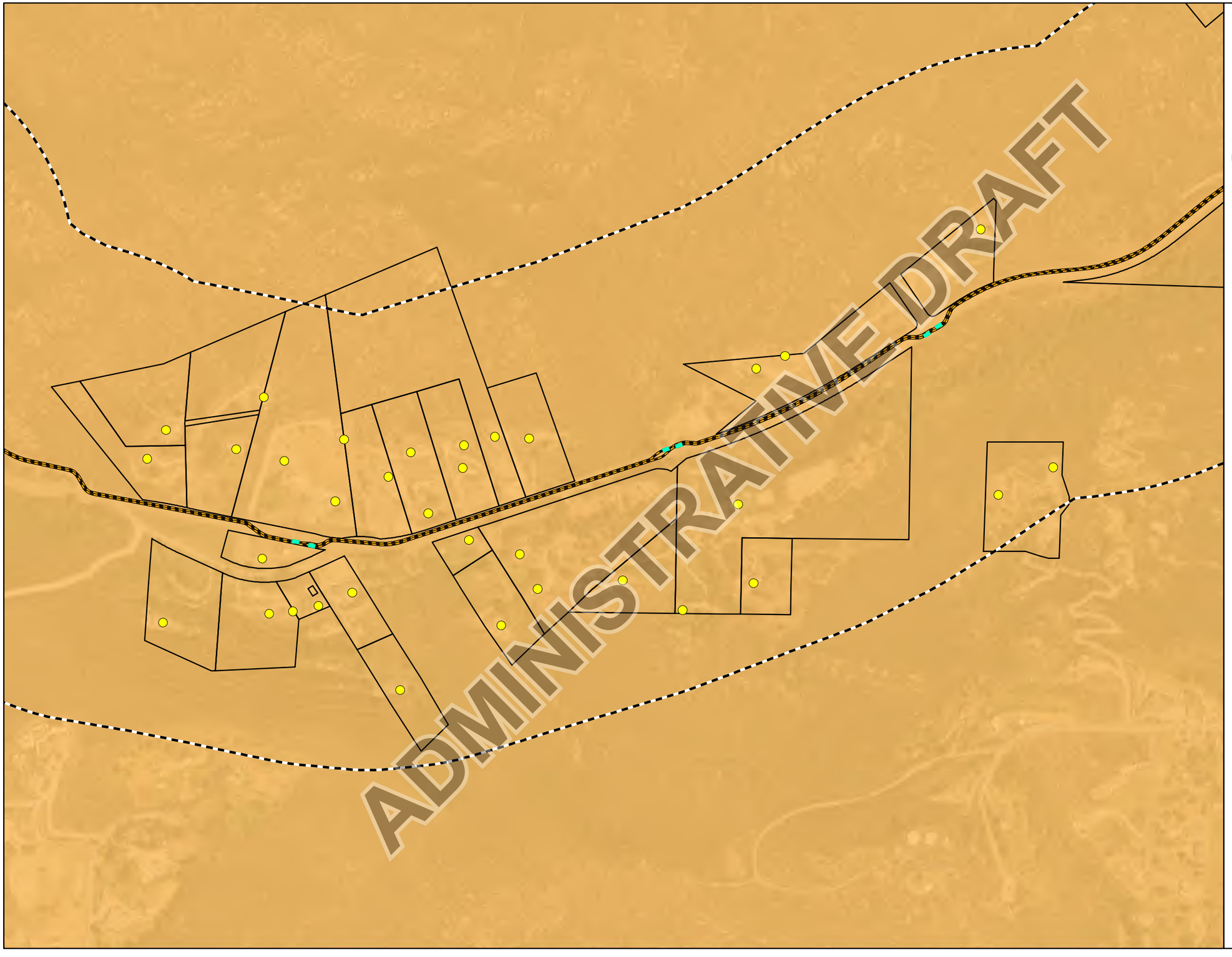


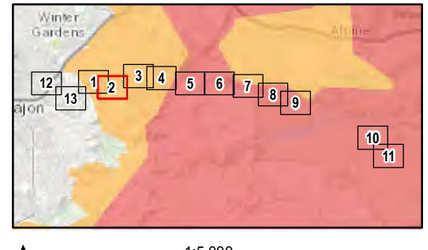
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 2 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- Vault
- Parcel Lines

Existing Structure

- Residence



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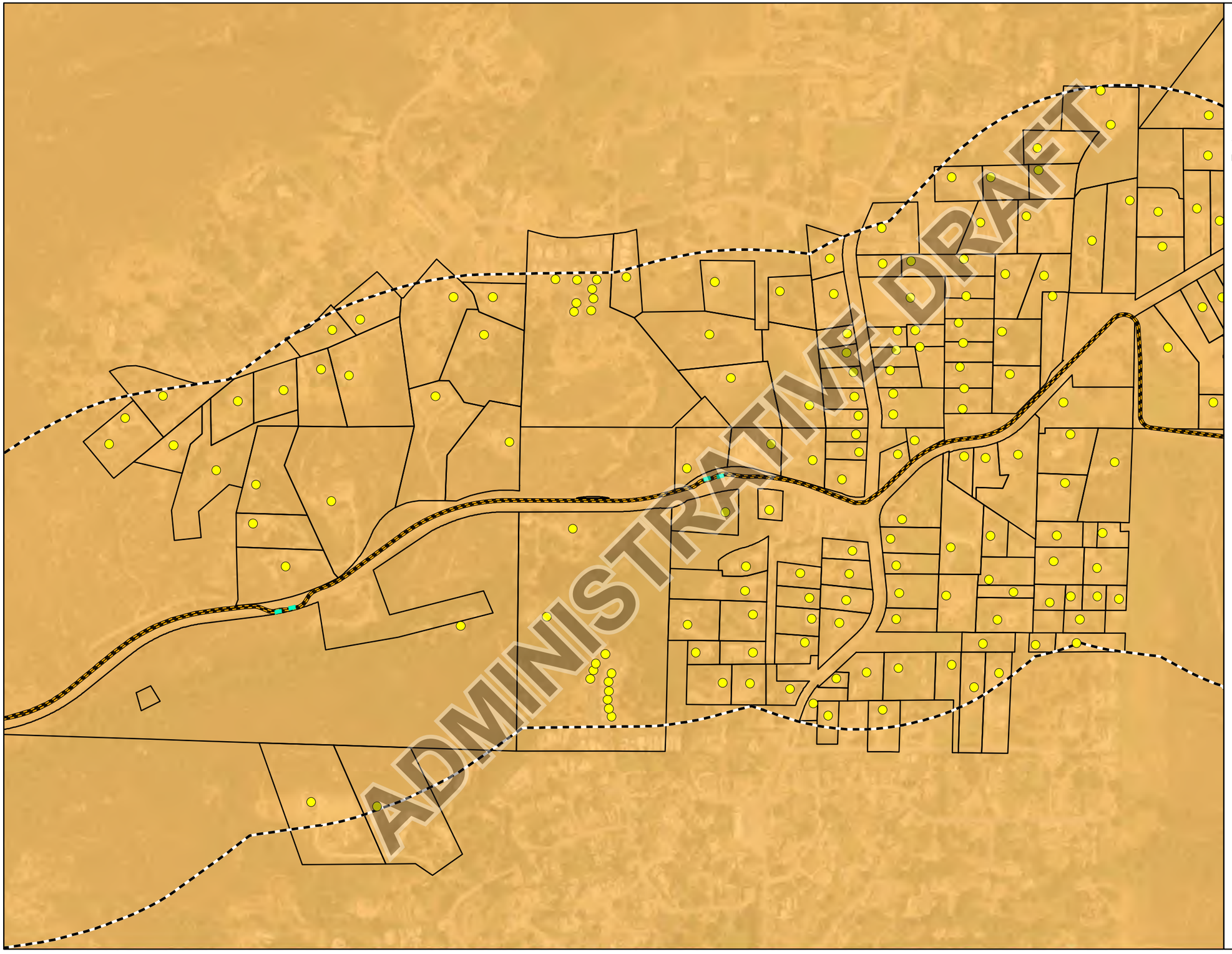


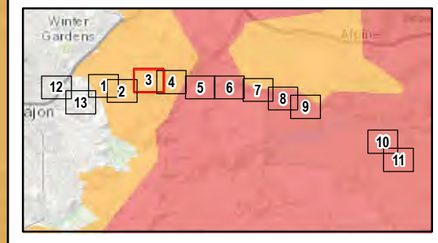
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 3 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- Vault
- Parcel Lines

Existing Structure

- Residence



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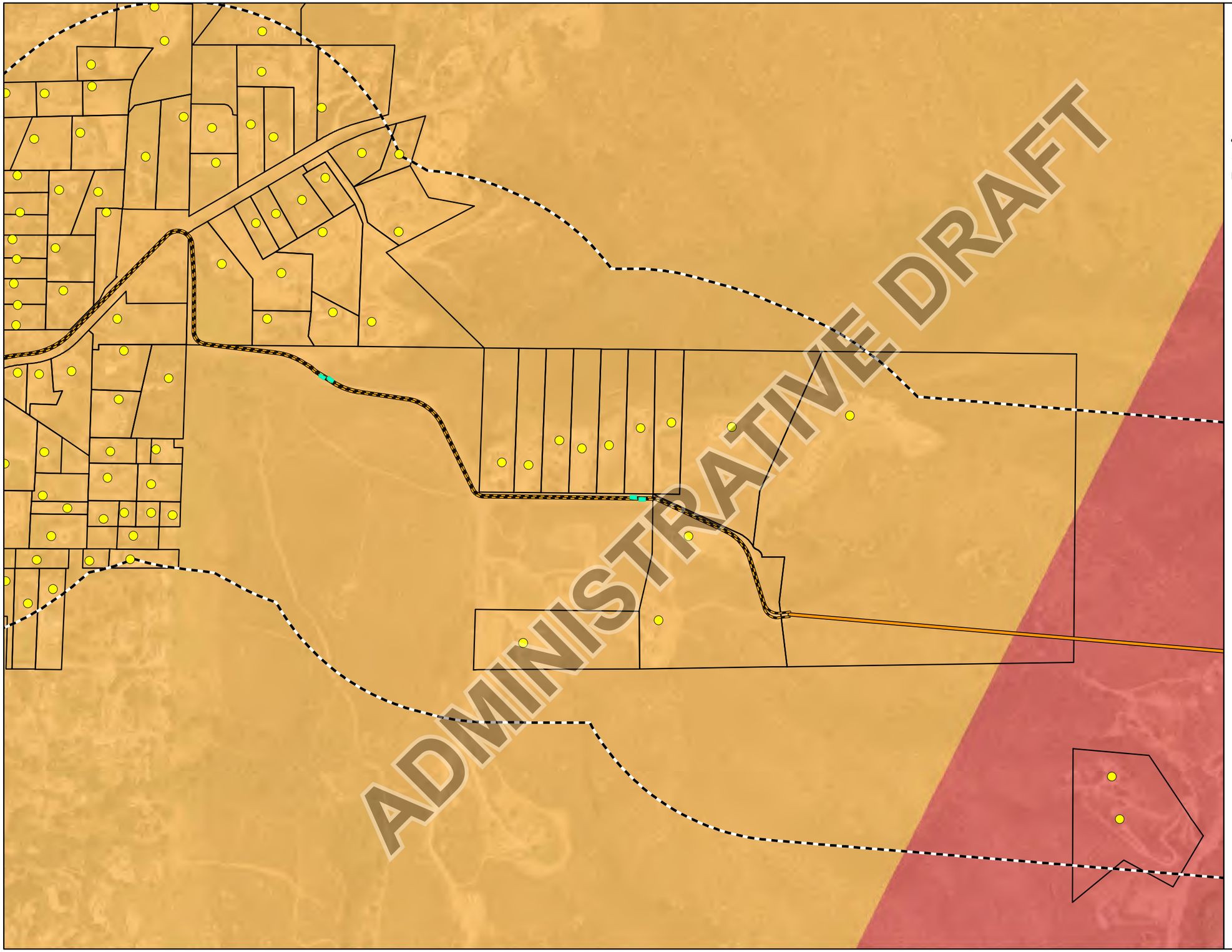


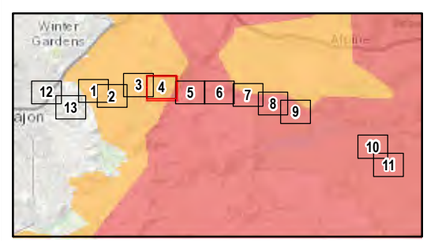
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 4 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Proposed 230 kV Western UG Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- California Public Utilities Commission - Tier 3
- Vault
- Parcel Lines

Existing Structure

- Residence



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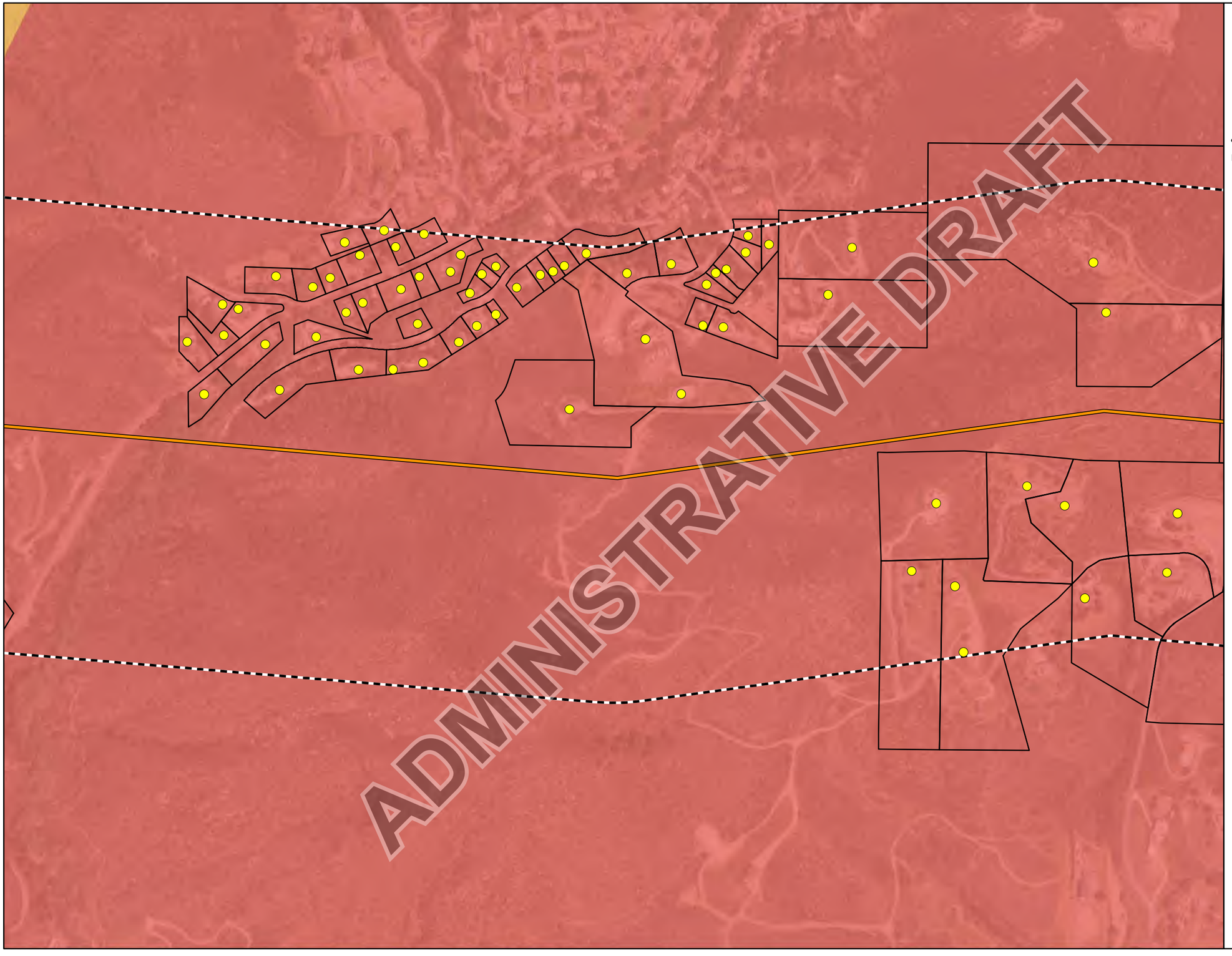


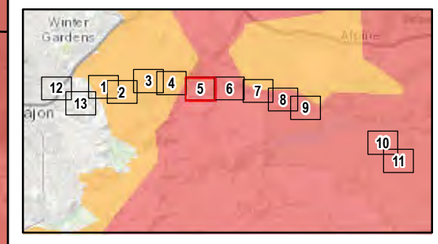
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 5 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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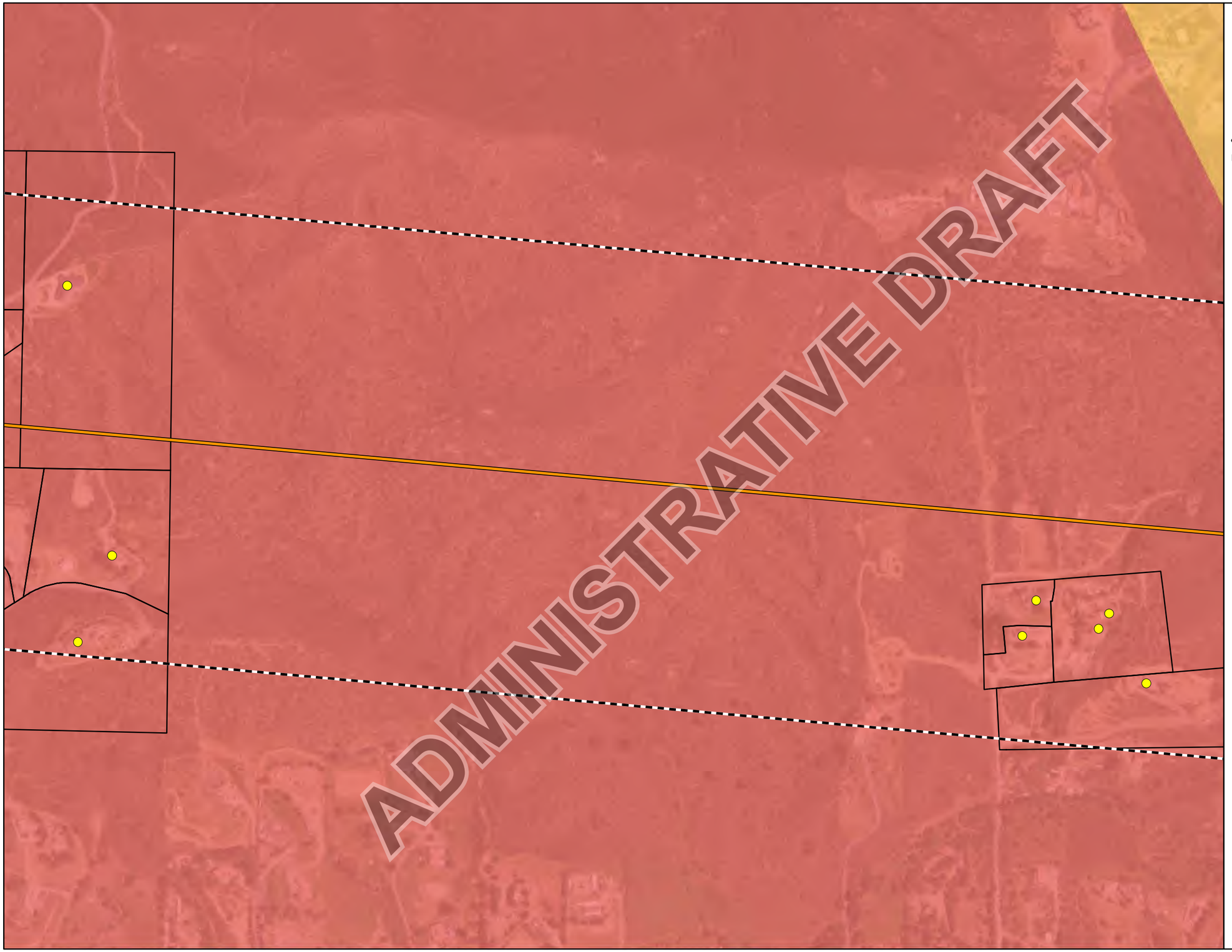


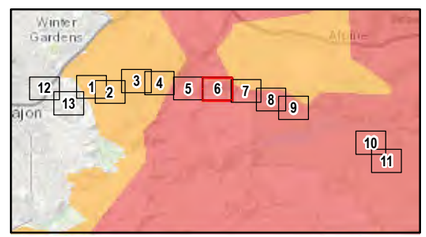
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 6 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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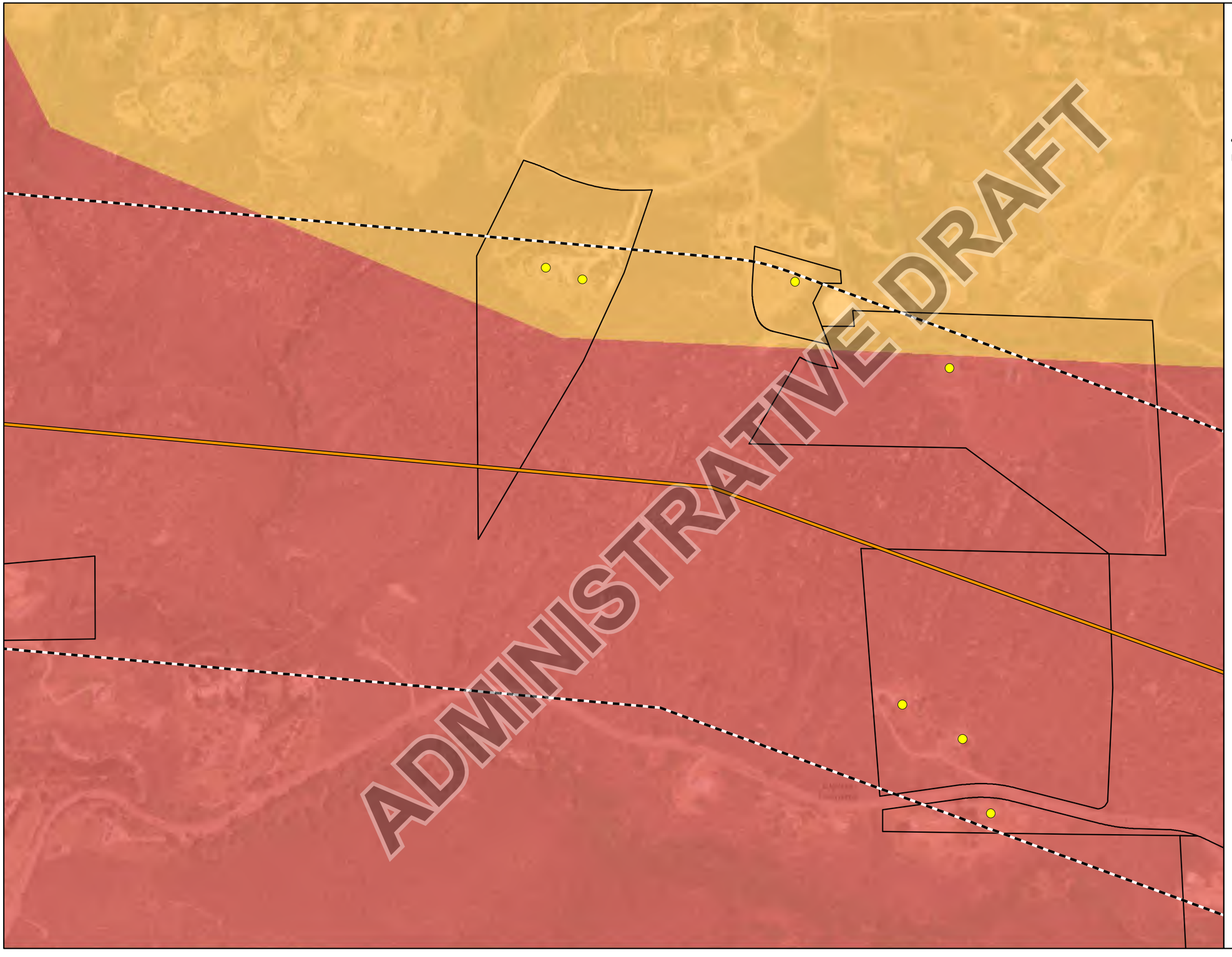


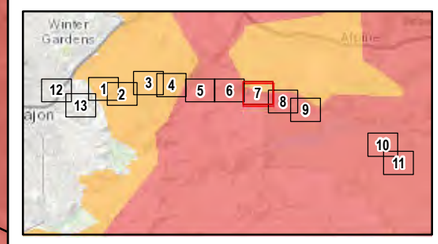
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 7 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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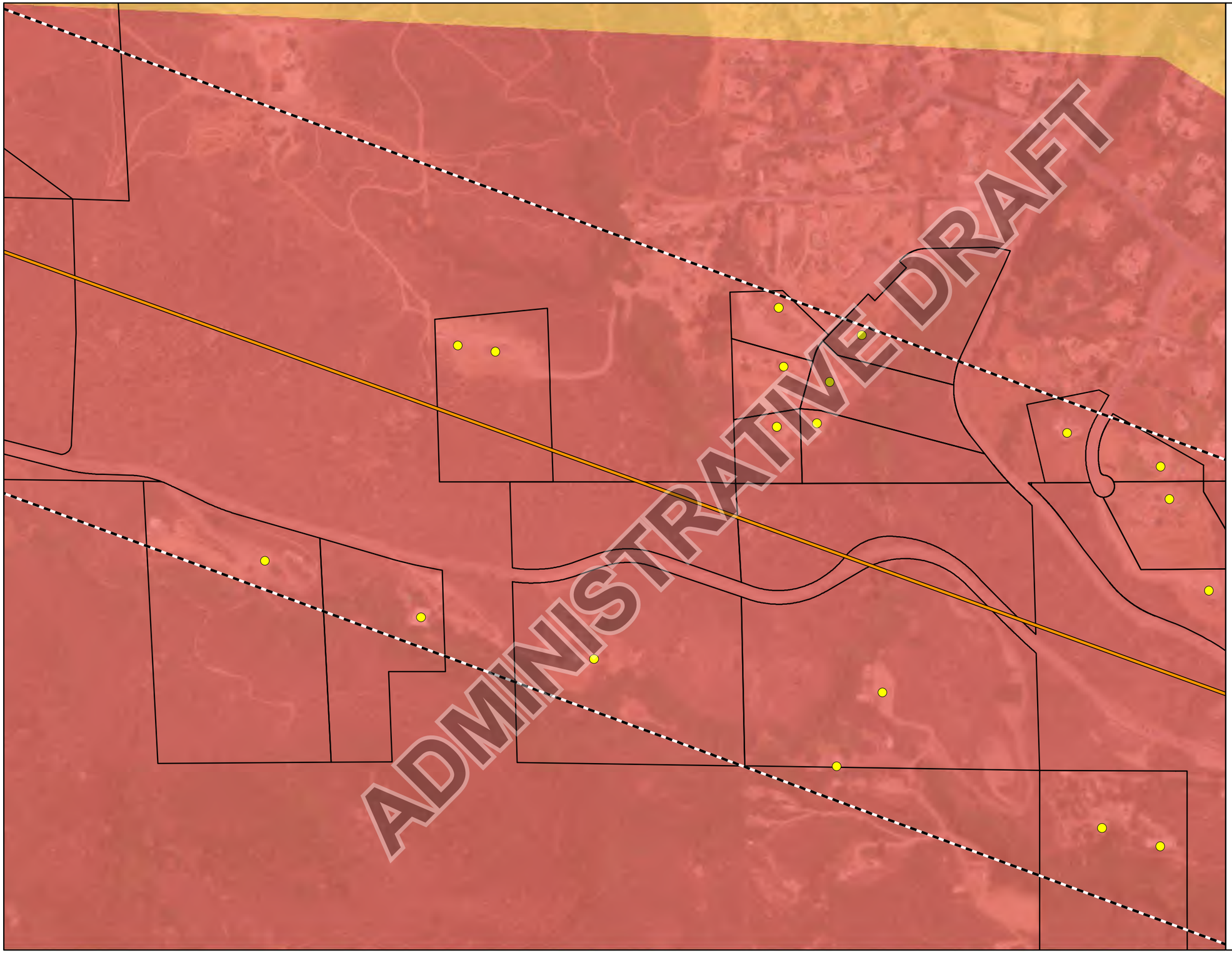


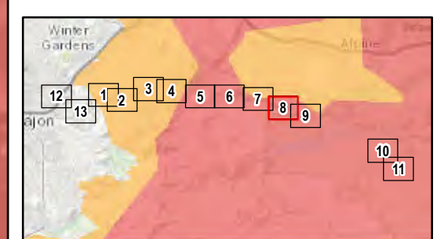
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 8 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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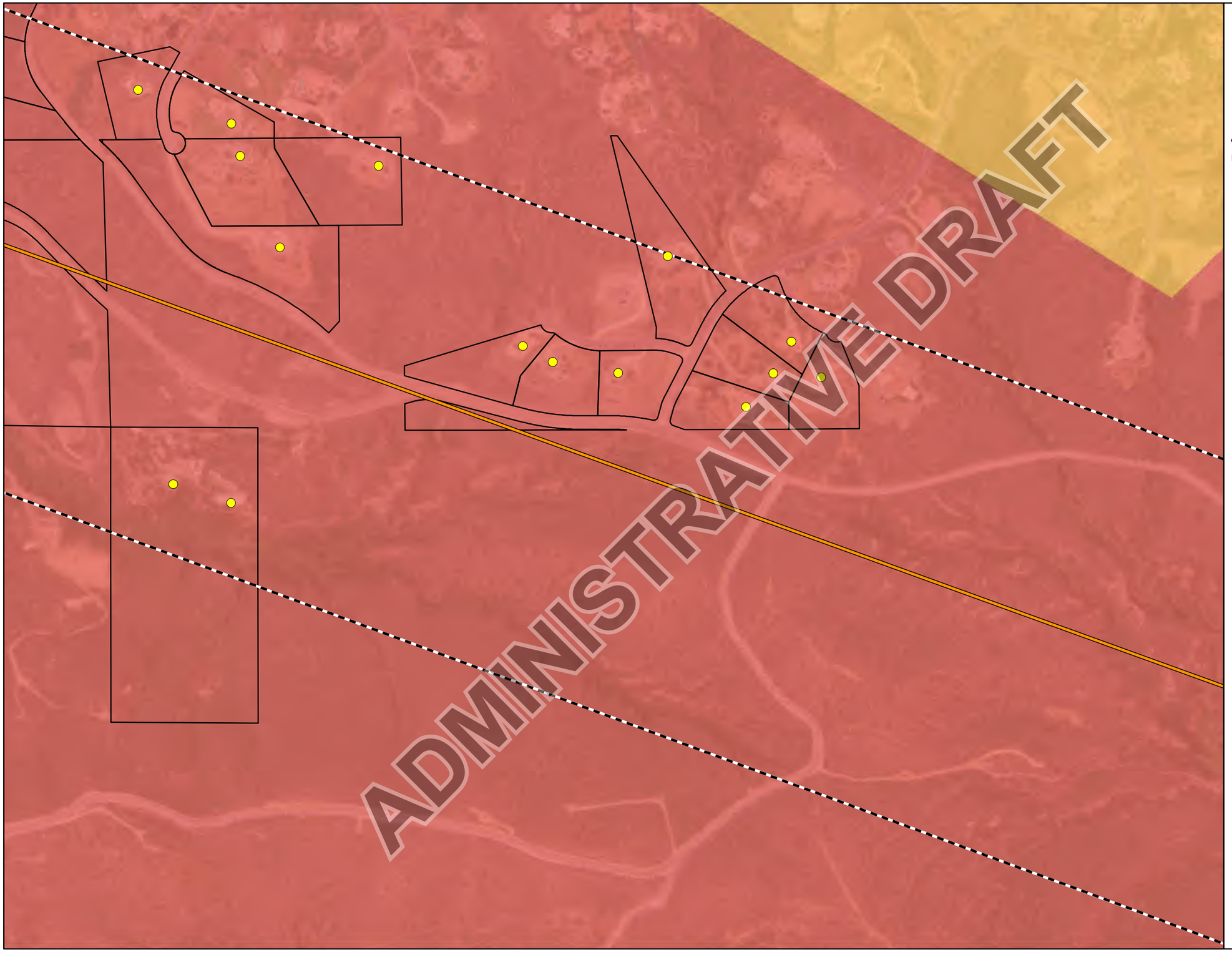


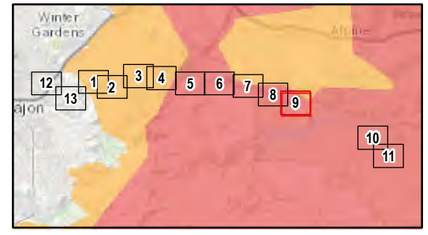
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 9 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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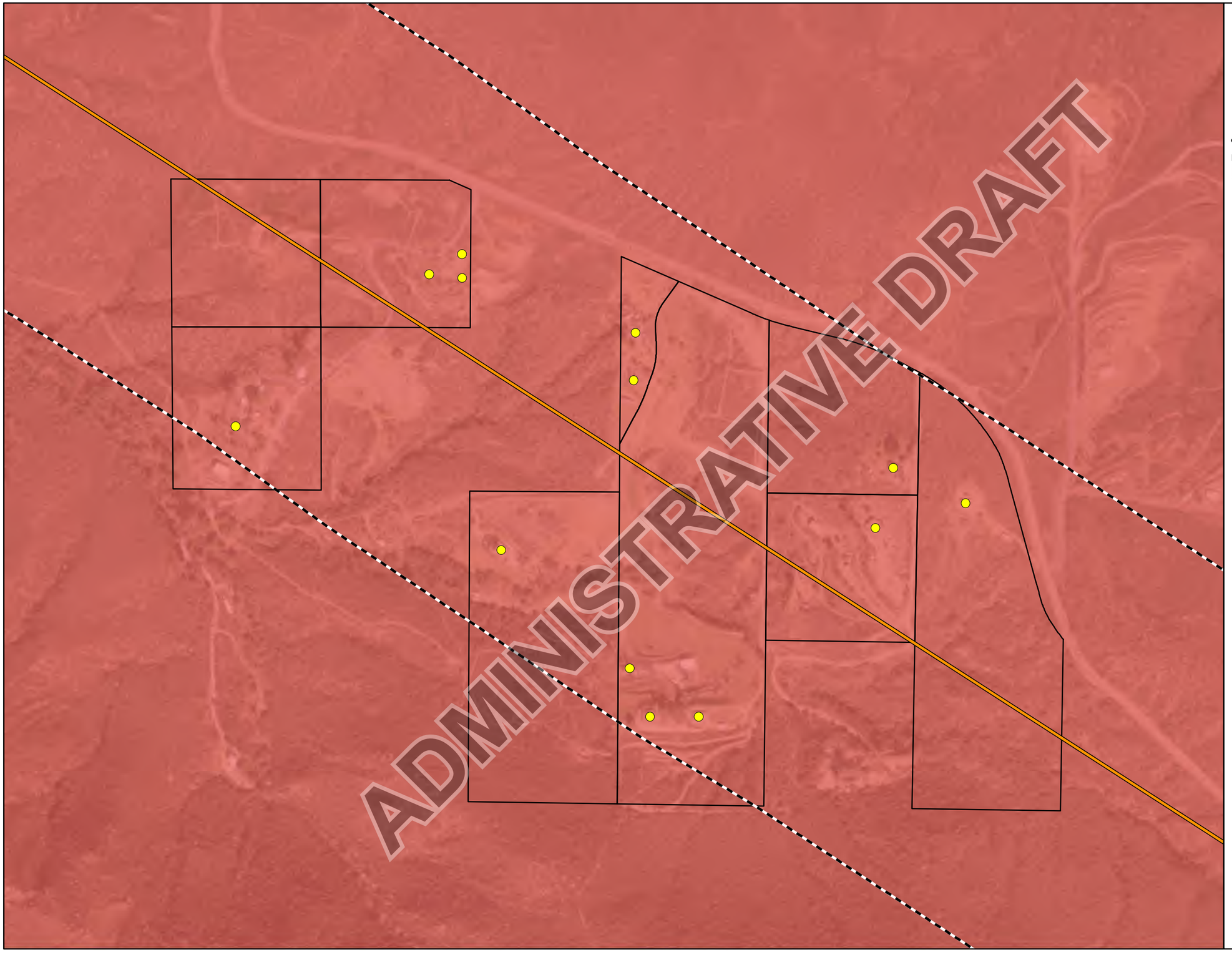


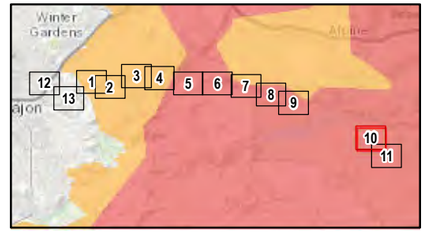
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 10 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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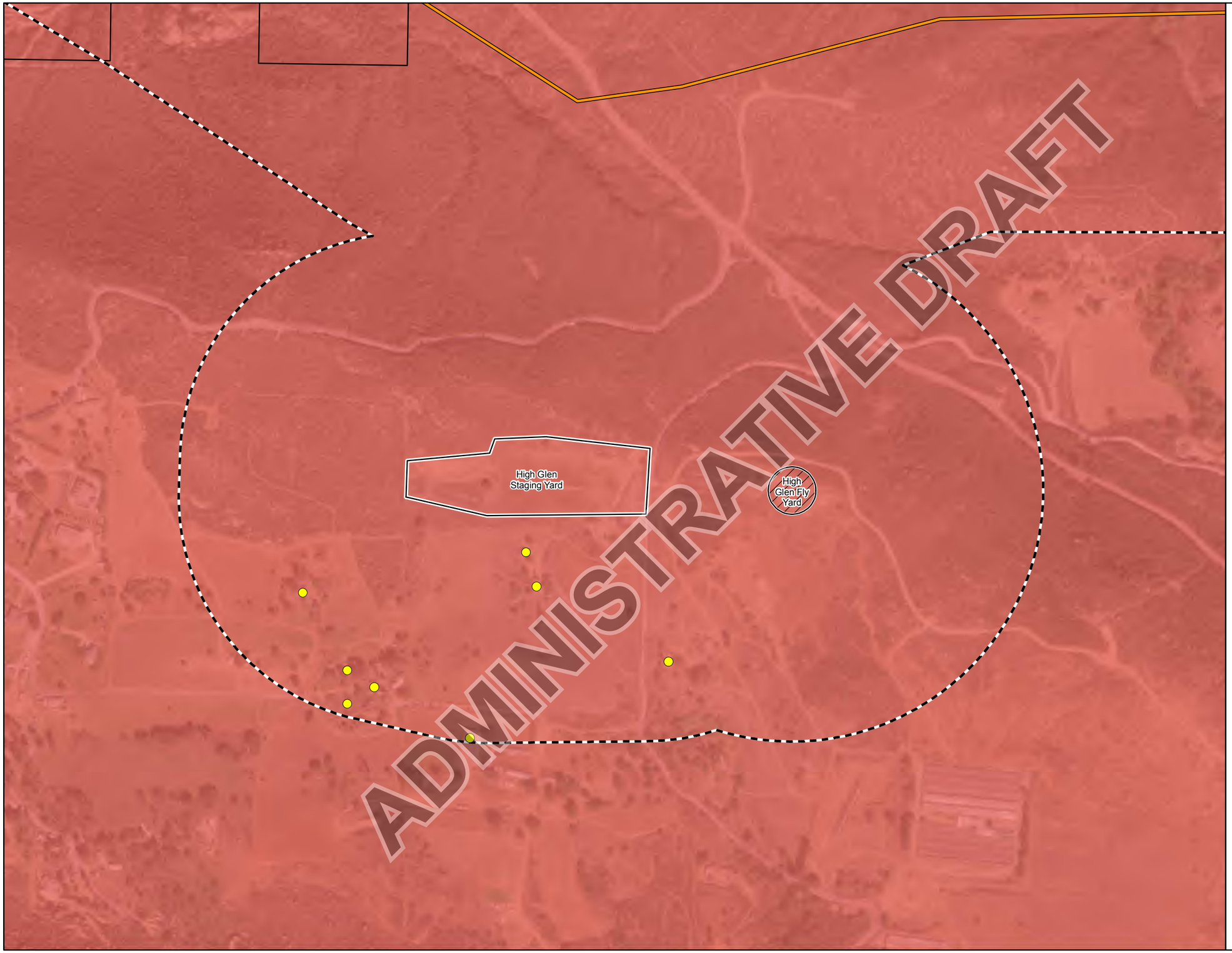


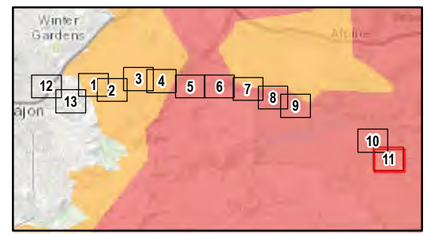
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 11 of 13

Suncrest
230 Kilovolt Loop-In Project

- Proposed 230 kV OH Segment
- Fly Yard
- Staging Yard
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 3
- Parcel Lines

Existing Structure

- Residence



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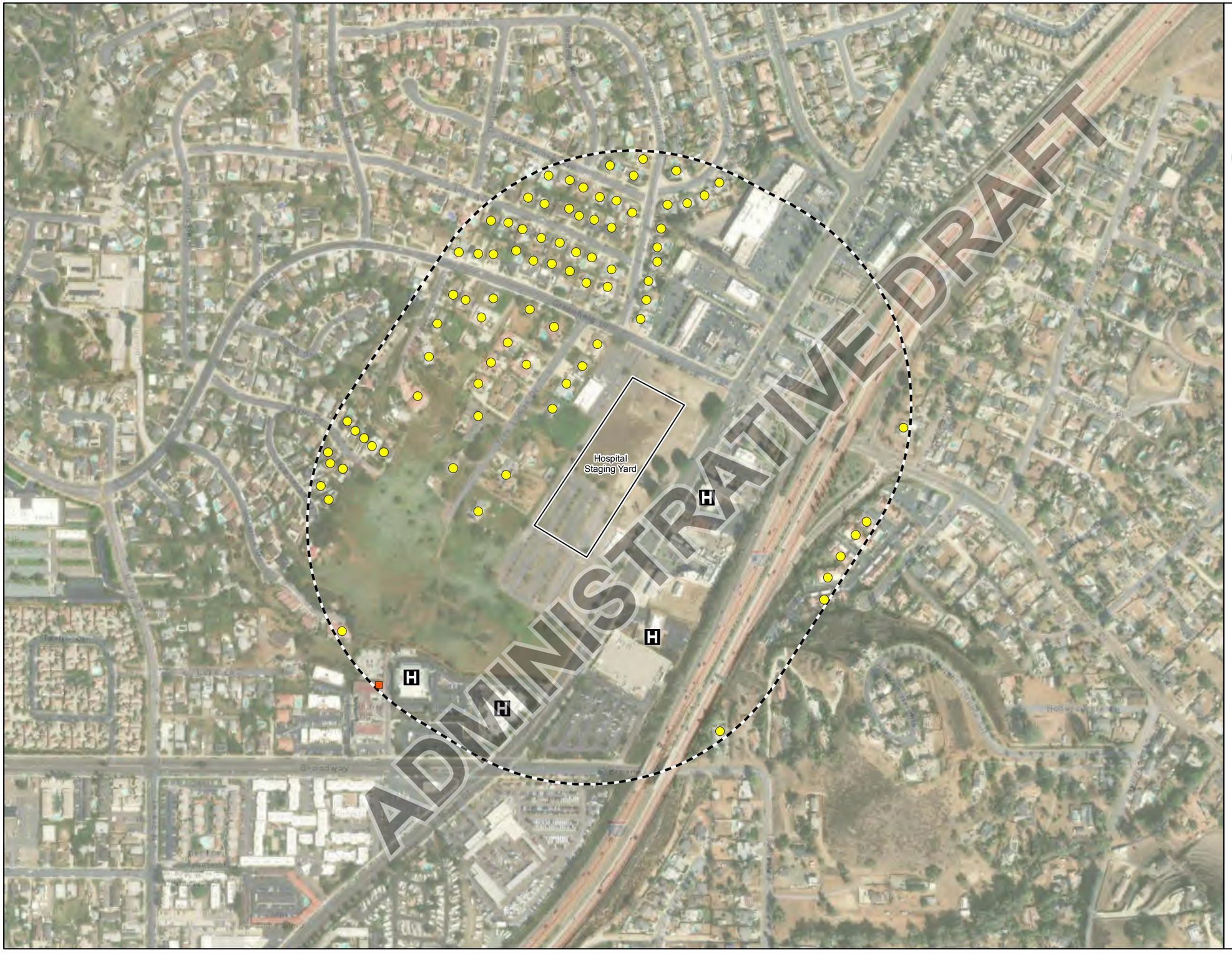

ADMINISTRATIVE DRAFT

Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 12 of 13

Suncrest
230 Kilovolt Loop-In Project

- Staging Yard
- 1000 Foot Buffer
- Parcel Lines

Existing Structure

- Hospital
- Residence
- Retirement/Nursing Home

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ADMINISTRATIVE DRAFT

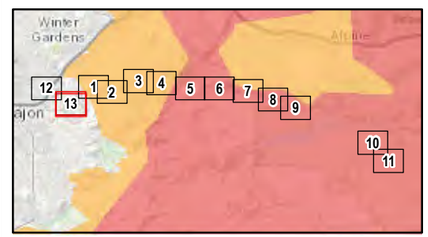
Attachment 3.21-B:
Structures within 1,000 Feet of the Proposed Project
Map 13 of 13

Suncrest
230 Kilovolt Loop-In Project

- Staging Yard
- 1000 Foot Buffer
- California Public Utilities Commission - Tier 2
- Parcel Lines

Existing Structure

- Residence
- School



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CHAPTER 4 – CUMULATIVE IMPACTS

4.1 APPROACH TO THE CUMULATIVE EFFECTS ANALYSIS

This chapter analyzes potential cumulative impacts related to the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project). The California Environmental Quality Act (CEQA) requires lead agencies to consider cumulative impacts of proposals under their review. CEQA Guidelines Section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." According to CEQA Guidelines Section 15130(a)(1), "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts." According to Section 15130(b)(5), the cumulative impacts analysis should "examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects."

CEQA Guidelines Section 15130(a)(3) also states that an environmental document may determine that a project's contribution to a significant cumulative impact would be rendered less-than-cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of mitigation measures (MMs) designed to alleviate the cumulative impact.

In conducting a cumulative impacts analysis, the proper frame of reference is the temporal span and spatial areas in which the project would cause impacts. In addition, Section 15130(b)(1) requires that a discussion of cumulative impacts must include either:

- a list of past, present, and probable future projects, including, if necessary, those outside the lead agency's control; or

- a summary of projections contained in an adopted local, regional, or statewide plan—or related planning document—that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a general plan, regional transportation plan, or plans for the reduction of greenhouse gas (GHG) emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information, such as a regional modeling program. Any such document will be referenced and made available to the public at a location specified by the lead agency.

The following subsections discuss whether the Proposed Project could result in significant short-term or long-term environmental impacts when combined with present, planned, and probable future projects in the area. Short-term impacts are generally associated with construction of the Proposed Project and present and future projects (hereafter referred to as Current and Future Projects), while long-term impacts are those that result from operations and maintenance (O&M) of the Proposed Project features or O&M of the Current and Future Projects.

4.1.1 Geographic Scope

The geographic area that could be affected by the Proposed Project and is appropriate for a cumulative impact analysis varies depending on the environmental resource. The geographic area

considered in the cumulative impact analysis of each environmental resource is presented in Table 4-1: Geographic Scope of Analysis for Resources.

4.2 RELATED PROJECTS AND PLANS

Review of the following resources identified Current and Future Projects within 3 miles of the Proposed Project:

- City of El Cajon Current Development Projects mapviewer,
- County of San Diego (County) Planning & Development Services Current Projects website,
- County Department of Public Works capital projects,
- Governor's Office of Land Use and Climate Innovation CEQAnet Web Portal,
- California Public Utilities Commission (CPUC) Current Project webpage,
- California Department of Transportation (Caltrans) State Highway Operation and Project Program (SHOPP) Ten-Year Project Book,
- California Department of Water Resources website,
- Sweetwater Authority Capital Improvement Projects Dashboard, and
- United States Forest Service (USFS) Schedule of Proposed Actions for Cleveland National Forest (CNF).

The Current and Future Projects are depicted in Figure 4-1: Current and Future Projects within 3 Miles of the Proposed Project and listed in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project. For each project identified, publicly available information was gathered through online research and by contacting agencies to determine the scope and schedule.

4.3 IMPACT ANALYSIS

The thresholds of significance for assessing cumulative impacts come from the CEQA Appendix G Environmental Checklist. For some environmental resources, the CEQA Appendix G Environmental Checklist includes similar criteria. For instance, the Hazards and Hazardous Materials section and Wildfire section both include criteria pertaining to emergency response plans and emergency evacuation plans, and this chapter analyzes the criteria in both sections.

4.3.1 Aesthetics

A cumulatively considerable impact to aesthetics would result if the Proposed Project's effects would combine with the effects of one or more Current and Future Projects to substantially and adversely change scenic vistas and/or the overall character of the area or create light and/or glare. At the project level, the Proposed Project would not impact scenic resources within a state scenic highway. Therefore, cumulative impacts to scenic resources within a state scenic highway are not analyzed.

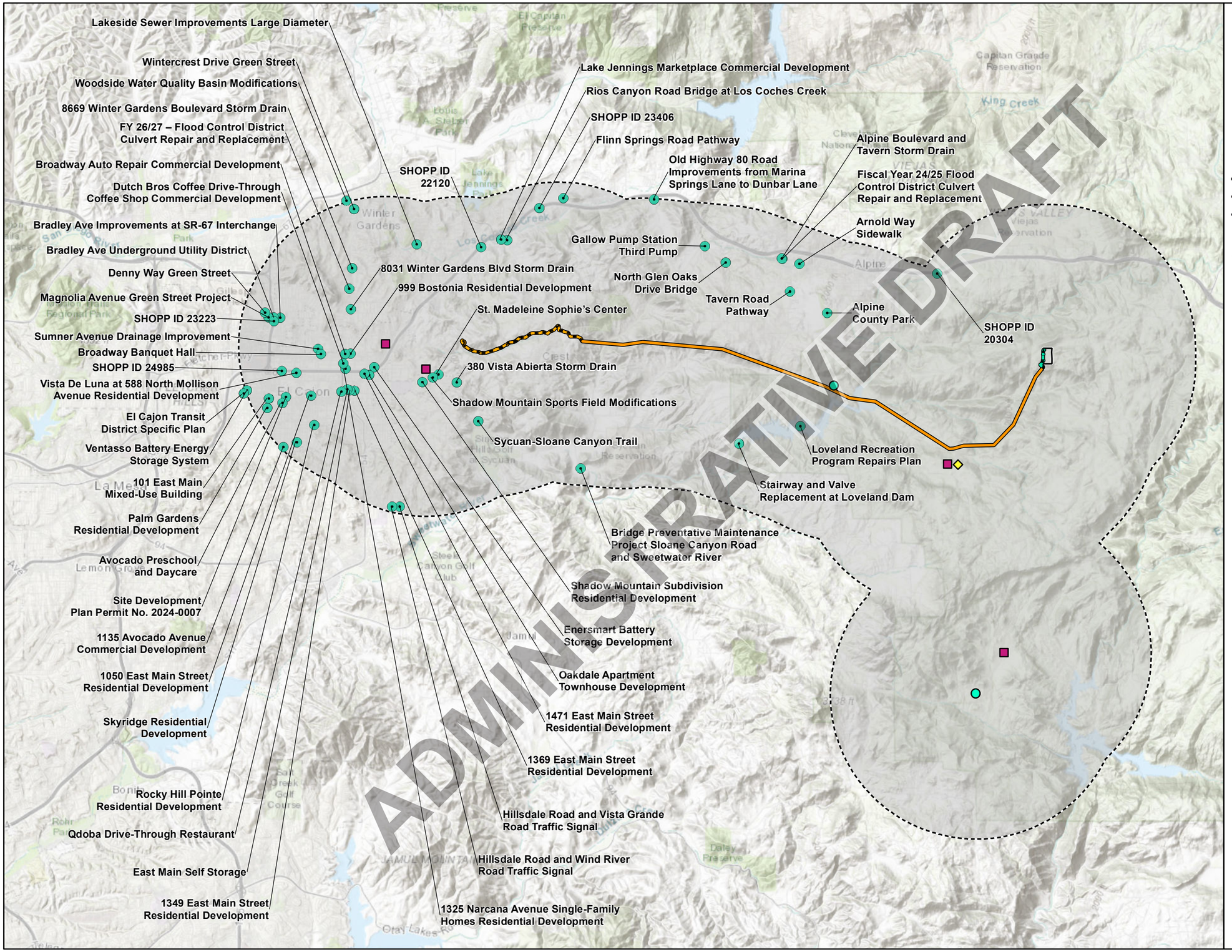

Figure 4-1:
Current and Future Projects Projects within 3 Miles of the Proposed Project

Suncrest
230 Kilovolt Loop-In Project

- Current and Future Projects
- Fly Yard
- Staging Yard
- Staging/Fly Yard
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation
- 3-Mile Buffer

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Table 4-1: Geographic Scope of Analysis for Resources

Resource Type	Geographic Scope (miles)	Explanation
Aesthetics	0.5	The geographic scope of analysis for cumulative aesthetics impacts includes the Proposed Project's viewshed, described in Section 3.2 Aesthetics, and encompasses the immediate viewshed within 0.5 mile to consider the main public roads, residents, and recreation areas in the vicinity of the Proposed Project. Roadway motorists, residents, and recreational users are the primary types of potentially affected viewer groups.
Agriculture and Forestry	3	The geographic scope, on a broader scale, for cumulative impacts on agriculture and forestry includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on agriculture and forestry.
Air Quality	See explanation	The San Diego Air Basin covers approximately 4,260 square miles and is the geographic scope for cumulative impacts. Cumulative impacts on sensitive receptors, workers, and odors are analyzed within a 0.25-mile radius due to the more localized nature of the impacts.
Biological Resources	3	The geographic scope of analysis for cumulative impacts on biological resources is a 3-mile radius around the Proposed Project, which encompasses the immediate surrounding area and habitat, wildlife corridors, or other sensitive natural communities beyond the Proposed Project.
Cultural Resources	See explanation	The geographic scope of analysis for cumulative cultural resource impacts depends on the type of resource. Typically, precontact and historic resources are located directly on the surface or subsurface, and cumulative impacts are thus considered on a more localized level that encompasses the Proposed Project ground disturbance areas. For built environment resources that are located above ground, cumulative visual, auditory, and atmospheric impacts are considered within a 1-mile radius to encompass views in the vicinity of the Proposed Project, the attenuative nature of noise, and concerns such as erosion and runoff.
Energy	3	The geographic scope, on a broader scale, for cumulative impacts on energy includes the state of California. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on energy.
Geology, Soils, and Paleontological Resources	3	The geographic scope varies for cumulative impacts on geology, soils, and paleontological resources. Cumulative seismic, faults, and soils impacts are evaluated within a radius of 3 miles. The geographic scope for paleontological resources is considered at a localized level because impacts are often site-specific and not additive across a landscape.
GHG Emissions	See explanation	The geographic scope of cumulative impacts for GHGs is the state of California because GHGs are regulated at the state level.

Resource Type	Geographic Scope (miles)	Explanation
Hazards and Hazardous Materials	1	The geographic scope for cumulative impacts on hazards and hazardous materials encompasses the 1-mile radius used in the EDR Corridor Report.
Hydrology and Water Quality	See explanation	Due to the connectivity of hydrological systems, the geographic scope for cumulative analysis includes the San Diego Bay Basin.
Land Use and Planning	1	The geographic scope for cumulative impacts on land use and planning varies from more localized to the county level. The geographic scope for this cumulative analysis encompasses the 1-mile radius used to identify land use designations in Section 3.12 Land Use and Planning and the land use in the greater area surrounding the Proposed Project.
Mineral Resources	3	The geographic scope, on a broader scale, for cumulative impacts on mineral resources includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on mineral resources.
Noise	1	The geographic scope for cumulative impacts on sensitive receptors is the Proposed Project and adjacent areas, as well as a 1-mile radius because noise attenuates with distance at an approximate rate of 6 decibels with every doubling of distance from the source of the noise.
Population and Housing	3	The geographic scope, on a broader scale, for cumulative impacts on population and housing includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on population and housing.
Public Services	3	The geographic scope, on a broader scale, for cumulative impacts on public services includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on public services.
Recreation	1	The geographic scope for cumulative impacts on recreation includes areas within a 1-mile radius of the Proposed Project Area. The radius encompasses local parks and portions of the California Riding and Hiking Trail (CRHT), CNF, and Crestridge Ecological Reserve, among other recreation areas.
Transportation	3	The geographic scope, on a broader scale, for cumulative impacts on transportation includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on transportation.

Resource Type	Geographic Scope (miles)	Explanation
Tribal Cultural Resources	See Explanation	The geographic scope of analysis for tribal cultural resource impacts depends on the type of resource. Typically, precontact resources are located directly on the surface or subsurface, and cumulative impacts are thus considered on a more localized level that encompasses the Proposed Project ground disturbance areas. For TCRs that could be located above ground, cumulative visual, auditory, and atmospheric impacts are considered within a 1-mile radius to encompass views in the vicinity of the Proposed Project, the attenuative nature of noise, and concern such as erosion and runoff.
Utilities and Service Systems	3	The geographic scope, on a broader scale, for cumulative impacts on utilities and service systems includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on utilities and service systems.
Wildfire	3	The geographic scope, on a broader scale, for cumulative impacts on wildfires includes eastern San Diego County. On a finer scale, the Proposed Project and a surrounding 3-mile radius were assessed for potential cumulative impacts on evacuation routes.

Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Loveland Recreation Program Repairs Plan	Development of a plan to address potential improvements to Loveland Reservoir's Recreation Program.	The proposed 230 kV transmission line would cross the north end of Loveland Reservoir. The Sweetwater Staging/Fly Yard would be located approximately 0.3 mile from Loveland Reservoir. The proposed High Glen Staging Yard would be located approximately 2.6 miles east of Loveland Reservoir. The proposed High Glen Fly Yard would be located approximately 2.9 miles east of Loveland Reservoir.	Planned[1]	Information Not Available (INA)	Not Applicable (N/A)
380 Vista Abierta Storm Drain	Repair or replacement of an existing 36-inch corrugated metal pipe at 380 Vista Abierta in the community of Granite Hills in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 0.6 mile north of the storm drain work. The proposed Greenfield Staging Yard line would be located approximately 0.62 mile north of the storm drain work. The proposed Hospital Staging Yard would be located approximately 1.7 miles north of the storm drain work.	Planned	Fiscal Year 2028/2029	Potential

[1] A planned project has gone before a planning commission or other agency and received a recommendation from the commission or agency staff that has furthered or will likely further the project's progress; or the project is currently in review by a planning commission or other agency and presumed—for the purpose of this cumulative impacts analysis—to receive a recommendation from the commission or agency staff that will further the project's progress; or the project is in the planning process and presumed—for the purpose of this cumulative impacts analysis—to eventually go through agency review to further the project's progress.

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Alpine County Park	Construction of an approximately 98-acre park, including restrooms, pickleball courts, a basketball court, baseball field, picnic area, and other recreation facilities at 2480 South Grade Road in the community of Alpine in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.2 miles south of the park.	Planned	INA	Potential
Stairway and Valve Replacement at Loveland Dam	Replacing two valves on the outlet of Loveland Dam and replacing the concrete stairway from the top of the dam to the valve house at the southwest end of Loveland Reservoir in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.3 miles north of the valve and stairway replacement. The proposed Sweetwater Staging/Fly Yard would be located approximately 2.3 miles north of the valve and stairway replacement.	Planned	Construction start date not available, anticipated completion in December 2026	None
Sycuan-Sloane Canyon Trail	Construction of an approximately 5-mile multi-use trail to serve hikers, bikers, and equestrians between the Sweetwater River Loop Trail and CRHT in San Diego County.	The western terminus of the proposed 230 kV transmission line would be located approximately 1.4 miles north of the western end of the proposed trail.	Planned	INA	Potential
Tavern Road Pathway	Replacement of an eroded decomposed granite pathway with a new decomposed granite pathway at Tavern Road in the community of Alpine in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.7 miles south of the pathway construction. The proposed Sweetwater Staging/Fly Yard would be located approximately 2.15 miles southeast of the pathway construction.	Planned	Fiscal Year 2025/2026	None

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Fiscal Year 24/25 Flood Control District Culvert Repair and Replacement	Repair and maintenance of the culvert on Tavern Road in the community of Alpine in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.7 miles south of the culvert repair and maintenance. The proposed Sweetwater Staging/Fly Yard would be located approximately 2.8 miles southeast of the culvert repair and maintenance.	Planned	Fiscal Year 2024/2025	None
Alpine Boulevard and Tavern Storm Drain	Repair or replacement of an existing 96-inch corrugated metal pipeline at Alpine Boulevard and Tavern Road in the community of Alpine in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.7 miles south of the storm drain repair or replacement. The proposed Sweetwater Staging/Fly Yard would be located approximately 2.8 miles southeast of the storm drain repair or replacement.	Planned	Fiscal Year 2025/2026	None
North Glen Oaks Drive Bridge	Maintenance construction on North Glen Oaks Bridge in the community of Alpine in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.8 miles south of the bridge maintenance.	Planned	Fiscal Year 2025/2026	None
SHOPP ID 22120	Rehabilitation of pavement by overlaying with hot mix asphalt, upgrade of a guardrail, rehabilitation of drainage systems, replacement of road signs, and improvement of bicycle and pedestrian paths from approximately 0.3 mile west of Lake Jennings Park Road to East Willow Road near the community of Winter Gardens in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 1.9 miles south of the highway repairs. The proposed Greenfield Staging Yard would be located approximately 2.8 miles southwest of the highway repairs. The proposed Hospital Staging Yard would be located approximately 2.8 miles southwest of the highway repairs.	Planned	2026/2027	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Galloway Pump Station Third Pump	Installation of a new pump, associated piping, electrical, and controls at the Galloway Pump Station in the community of Alpine.	The proposed 230 kV transmission line would be located, at its closest point, approximately 2.1 miles south of the pump station work.	Under Construction	Procurement of the pump has been initiated and will be installed after receipt.	Potential
Lakeside Sewer Improvements Large Diameter	Lining and replacement of an existing sewer pipeline and consolidation of two branch lines into a main line along Ha Hana Road in the community of Lakeside in San Diego County.	The western terminus of the proposed 230 kV transmission line would be located approximately 2.3 miles southeast of the sewer improvements.	Planned	Fiscal Year 2024/2025	None
Rios Canyon Road Bridge at Los Coches Creek	Replacement of a bridge at Rios Canyon Road in the community of Lakeside in San Diego County.	The western terminus of the proposed 230 kV transmission line would be located approximately 2.3 miles south of the bridge replacement.	Planned	INA	Potential
Arnold Way Sidewalk	Construction of 1,956 linear feet of sidewalks on the south side of Arnold Way between Tavern Road and Alpine Boulevard in the community of Alpine in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 2.3 miles south of the sidewalk construction. The proposed Sweetwater Staging/Fly Yard would be located approximately 2.5 miles south of the sidewalk construction.	Planned	INA	Potential
SHOPP ID 23406	Biological monitoring for an Environmental Assessment for a drainage project from approximately 0.7 mile west of Flinn Springs Road undercrossing to 0.2 mile east of Crestwood Road undercrossing in the community of Blossom Valley in San Diego County.	The proposed new 230 kV transmission line would be located, at its closest point, approximately 2.4 miles south of biological monitoring.	Planned	2024/2025	None

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
8031 Winter Gardens Blvd Storm Drain	Repair or replacement of two existing 54-inch corrugated metal pipes at 8031 Winter Gardens Boulevard in the community of Winter Gardens in San Diego County.	The western terminus of the proposed 230 kV transmission line would be located approximately 2.5 miles southeast of the storm drain repair or replacement. The proposed Greenfield Staging Yard would be located approximately 1.9 miles southeast of the storm drain repair or replacement. The proposed Hospital Staging Yard would be located approximately 1 mile southeast of the storm drain repair or replacement.	Planned	Fiscal Year 2027/2028	Potential
FY 26/27 – Flood Control District Culvert Repair and Replacement	Repair and maintenance of a culvert at the Winter Gardens Boulevard Locations 1 and 2 projects in the community of Winter Gardens in San Diego County.	The western terminus of the proposed 230 kV transmission line would be located approximately 2.6 miles southeast of the culvert repair and maintenance. The proposed Greenfield Staging Yard would be located approximately 2.2 miles southeast of the culvert repair and maintenance. The proposed Hospital Staging Yard would be located approximately 1.3 miles southeast of the culvert repair and maintenance.	Planned	Fiscal Year 2026/2027	Potential
Flinn Springs Road Pathway	Construction of a pathway on Flinn Springs Road from Blossom Valley Road to Old Highway 80 in the community of Flinn Springs in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 2.6 miles south of the pathway construction.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Bridge Preventative Maintenance Project Sloane Canyon Road and Sweetwater River	Conducting a scour evaluation study of the bridge at Sloan Canyon Road and Sweetwater River in the community of Dehesa in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 2.6 miles north of the scour evaluation.	Planned	INA	Potential
8669 Winter Gardens Blvd Storm Drain	Repair of the lining of an existing 30-inch and an existing 36-inch corrugated metal pipe at 8669 Winter Garden Boulevard in the community of Lakeside in San Diego County.	The western terminus of the proposed 230 kV transmission line would be located approximately 2.8 miles southeast of the storm drain repairs. The proposed Greenfield Staging Yard would be located approximately 2.5 miles southeast of the storm drain repairs. The proposed Hospital Staging Yard would be located approximately 1.7 miles southeast of the storm drain repairs.	Planned	Fiscal Year 2027/2028	Potential
Old Highway 80 Road Improvements from Marina Springs Lane to Dunbar Lane	Construction of road upgrades to create a two-lane continuous left turn lane located between Marina Springs Lane and Dunbar Lane in the community of Flinn Springs in San Diego County.	The proposed 230 kV transmission line would be located, at its closest point, approximately 2.8 miles south of the highway improvements.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
SHOPP ID 20304	Pavement work on approximately 21.1 lane miles of Interstate 8 in San Diego County, with additional work on drainage systems and Transportation Management Systems.	The proposed 230 kV transmission line, at its closest point, would be located approximately 3 miles south of the highway improvements. The existing Suncrest Substation is located approximately 2.7 miles northwest of the highway improvements.	Planned	2029/2030	Potential
Lake Jennings Marketplace Commercial Development	Construction of a commercial shopping center project on an approximately 13-acre site that would include six new buildings totaling 76,100 square feet, a gasoline station with car wash, and parking for 389 vehicles.	The proposed 230 kV transmission line would be located, at its closest point, approximately 2 miles south of the shopping center.	Planned	INA	Potential
Sumner Avenue Drainage Improvement	Redesign and extension of an existing drainage to improve downstream drainage and connect to an existing drainage channel to the south in the community of Bostonia in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 2.2 miles east of the drainage improvement. The proposed Hospital Staging Yard would be located approximately 1.3 miles east of the drainage improvement.	Planned	INA	Potential
Hillsdale Road and Vista Grande Road Traffic Signal	Construction of a traffic signal and other intersection improvements at Hillsdale Road and Vista Grande Road in the community of Valle De Oro in San Diego County.	The proposed Greenfield Staging Yard would be located approximately 2.9 miles northeast of the traffic signal construction and intersection improvements.	Planned	INA	Potential
Hillsdale Road and Wind River Road Traffic Signal	Installation of a new traffic signal at Hillsdale Road and Wind River Road in the community of Valle De Oro in San Diego County.	The proposed Greenfield Staging Yard would be located approximately 2.9 miles northeast of the traffic signal installation.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
SHOPP ID 24985	Guard rail and reactive safety improvements to 5,280 feet of highway in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 2.9 miles east of the highway improvements. The proposed Hospital Staging Yard would be located approximately 2.1 miles east of the highway improvements.	Planned	2027/2028	Potential
St. Madeleine Sophie's Center	Expansion of the facility onto an adjacent property with a new approximately 5,000-square-foot building in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 0.8 mile northeast of the facility. The proposed Greenfield Staging Yard would be located approximately 0.2 mile northwest of the facility. The proposed Hospital Staging Yard would be located approximately 1.2 miles northwest of the facility.	Under Construction	INA	None
Shadow Mountain Sports Field Modifications	Modifications to the existing sports field to replace existing metal spectator stands with a new 300-seat concrete grandstand with shade structure, new netting around the ball fields, and new concrete stairs and entryway features in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 0.9 mile northeast of the Shadow Mountain Community Church field. The proposed Greenfield Staging Yard would be located approximately 0.2 mile north of the Shadow Mountain Community Church field. The proposed Hospital Staging Yard would be located approximately 1.2 miles northwest of the Shadow Mountain Community Church field.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Shadow Mountain Subdivision Residential Development	Construction of a 23-lot residential development in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 1.2 miles northeast of the residential development. The proposed Greenfield Staging Yard would be located approximately 0.2 mile north of the residential development. The proposed Hospital Staging Yard would be located approximately 1.1 miles northwest of the residences.	Planned	INA	Potential
Enersmart Battery Storage Development	Construction of grid tied battery storage system in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 1.9 miles northeast of the battery storage system. The proposed Greenfield Staging Yard would be located approximately 1 mile east of the battery storage system. The proposed Hospital Staging Yard would be located approximately 0.5 mile northeast of the battery storage system.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Oakdale Apartment Townhouse Development	Construction of seven apartment townhouses and two-car garages in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.1 miles northeast of the Oakdale Apartment Townhouses. The proposed Greenfield Staging Yard would be located approximately 1.1 miles east of the Oakdale Apartment Townhouses. The proposed Hospital Staging Yard would be located approximately 0.7 mile northeast of the townhouses.	Planned	INA	Potential
1471 East Main Street Residential Development	Construction of a nine-unit, three-story condominium development in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.2 miles northeast of the condominiums. The proposed Greenfield Staging Yard would be located approximately 0.2 mile east of the condominiums. The proposed Hospital Staging Yard would be located approximately 0.7 mile northeast of the condominiums.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
1369 East Main Street Residential Development	Construction of the Melody Condominiums in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.5 miles northeast of the condominiums. The proposed Greenfield Staging Yard would be located approximately 1.6 miles northeast of the condominiums. The proposed Hospital Staging Yard would be located approximately 1.2 miles northeast of the condominiums.	Planned	INA	Potential
1349 East Main Street Residential Development	Conversion to single-room occupancy residences in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.6 miles northeast of the residences. The proposed Greenfield Staging Yard would be located approximately 1.6 miles east of the residences. The proposed Hospital Staging Yard would be located approximately 1.2 miles northeast of the residences.	Planned	INA	Potential
999 Bostonia Residential Development	Construction of seven detached residences in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.4 miles east of the residences. The proposed Greenfield Staging Yard would be located approximately 1.6 miles east of the residences. The proposed Hospital Staging Yard would be located approximately 0.8 mile east of the residences.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Broadway Auto Repair Commercial Development	Demolition and rebuild of the Broadway auto repair facility in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.5 miles east of the auto repair facility. The proposed Greenfield Staging Yard would be located approximately 1.7 miles east of the facility. The proposed Hospital Staging Yard would be located approximately 0.9 mile east of the auto repair facility.	Planned	INA	Potential
East Main Self Storage	Construction of a four-story self-storage facility with 93,628 gross square feet in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.7 miles northeast of the storage facility. The proposed Greenfield Staging Yard would be located approximately 1.7 miles east of the storage facility. The proposed Hospital Staging Yard would be located approximately 1.2 miles northeast of the storage facility.	Under Construction	INA	None
1325 Narcana Avenue Single-Family Homes Residential Development	Construction of three new single-family homes in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.6 miles northeast of the homes. The proposed Greenfield Staging Yard would be located approximately 1.7 miles east of the homes. The proposed Hospital Staging Yard would be located approximately 1 mile northeast of the homes.	Under Construction	INA	None

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Dutch Bros Coffee Drive-Through Coffee Shop Commercial Development	Construction of a 950-square-foot drive-through coffee shop in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.6 miles northeast of the coffee shop. The proposed Greenfield Staging Yard would be located approximately 1.7 miles east of the coffee shop. The proposed Hospital Staging Yard would be located approximately 1 mile northeast of the coffee shop.	Under Construction	INA	None
Qdoba Drive-Through Restaurant	Construction of a detached building for a fast casual restaurant and drive-through in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 2.8 miles northeast of the restaurant. The proposed Greenfield Staging Yard would be located approximately 1.8 miles east of the restaurant. The proposed Hospital Staging Yard would be located approximately 1.4 miles northeast of the restaurant.	Planned	INA	Potential
Broadway Banquet Hall	Construction of a new two-story, 21,583-square-foot banquet hall with on-sale alcohol service in the City of El Cajon.	The proposed 230 kV transmission line, at its closest point, would be located approximately 3 miles east of the banquet hall. The proposed Greenfield Staging Yard would be located approximately 2.2 miles east of the banquet hall. The proposed Hospital Staging Yard would be located approximately 1.4 miles east of the banquet hall.	Under Construction	INA	None

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
1050 East Main Street Residential Development	Construction of 132 townhomes in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 2.5 miles east of the townhomes. The proposed Hospital Staging Yard would be located approximately 1.9 miles northeast of the townhomes.	Planned	INA	Potential
Rocky Hill Pointe Residential Development	Construction of 26 residences in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 2.7 miles northeast of the residences. The proposed Hospital Staging Yard would be located approximately 2.2 miles northeast of the residences.	Under Construction	INA	None
Vista De Luna at 588 North Mollison Avenue Residential Development	Conversion of Econo Lodge to 75 single-room occupancy dwelling units in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 2.7 miles east of the residences. The proposed Hospital Staging Yard would be located approximately 2.3 miles east of the residences.	Under Construction	INA	None
Skyridge Residential Development	Construction of 19 townhomes in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 3 miles northeast of the townhomes. The proposed Hospital Staging Yard would be located approximately 2.8 miles northeast of the townhomes.	Under Construction	INA	None

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Site Development Plan Permit No. 2024-0007	Partial redevelopment of a site with existing commercial uses with 40 apartment units, a residential recreation building with a leasing office, and a commercial storefront with appurtenant private and public improvements in the City of El Cajon.	The proposed Greenfield Staging Yard would be located approximately 2.9 miles east of the site development. The proposed Hospital Staging Yard would be located approximately 2.2 miles northeast of the site development.	Planned	INA	Potential
Bradley Ave Improvements at State Route (SR-) 67 Interchange	Improvements to the road at the Bradley Avenue interchange at SR-67 and widening of the road to the east in the community of Lakeside in San Diego County.	The proposed Hospital Staging Yard would be located approximately 2.3 miles southeast of the road improvement work.	Planned	Fiscal Year 2025-2029	Potential
Bradley Ave Underground Utility District	Conversion of existing overhead utility lines to underground and removal of utility poles in the community of Lakeside in San Diego County.	The proposed Hospital Staging Yard would be located approximately 2.4 miles southeast of the utility undergrounding and pole removal.	Planned	INA	Potential
Magnolia Avenue Green Street Project	Construction of vegetated tree wells, capture devices, and transportation/pedestrian improvements along Magnolia Avenue in the community of Lakeside in San Diego County.	The proposed Hospital Staging Yard would be located approximately 2.4 miles southeast of the construction and transportation/pedestrian facility improvements.	Planned	Fiscal Year 2026-2029	Potential
Denny Way Green Street	Construction of vegetated tree wells, capture devices, and transportation/pedestrian improvements in the roadway right-of-way along Denny Way in the community of Lakeside in San Diego County.	The proposed Hospital Staging Yard would be located approximately 2.4 miles southeast of the construction and transportation/pedestrian facility improvements.	Planned	INA	Potential

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Wintercrest Drive Green Street	Construction of vegetated tree wells, capture devices, and transportation/pedestrian improvements along Wintercrest Drive in the community of Lakeside in San Diego County.	The proposed Hospital Staging Yard would be located approximately 2.8 miles south of the construction and transportation/pedestrian facility improvements.	Planned	Fiscal Year 2026-2028	Potential
Woodside Water Quality Basin Modifications	Retrofitting of existing water quality basin outlets to maximize low water flow.	The proposed Hospital Staging Yard would be located approximately 3 miles south of outlet retrofitting.	Planned	Fiscal Year 2026/2027	Potential
SHOPP ID 23223	Construction of a census station and sidewalks; installation of crosswalks, traffic signals, and Transportation Management Systems; modification/repair of curbs and crosswalks; and other safety improvements.	The proposed Hospital Staging Yard would be located approximately 2.3 miles southeast of the facility improvements.	Planned	2032/2033	Potential
1135 Avocado Avenue Commercial Development	Amendment to Specific Plan No. 32 to allow for a neighborhood serving warehouse, distribution, and wholesale in the City of El Cajon.	The proposed Hospital Staging Yard would be located approximately 3 miles northeast of the commercial development.	Planned	INA	Potential
Palm Gardens Residential Development	Construction of a nine-unit apartment development with nine parking spaces in the City of El Cajon.	The proposed Hospital Staging Yard would be located approximately 2.8 miles northeast of the residential development.	Planned	INA	Potential
Avocado Preschool and Daycare	Construction of a preschool and day care facility with a capacity of 58 children in the City of El Cajon.	The proposed Hospital Staging Yard would be located approximately 2.4 miles northeast of the preschool.	Under Construction	INA	None
101 East Main Mixed-Use Building	Reuse of an existing commercial building consisting of approximately 11,000 square feet of commercial space and 15 residential units in the City of El Cajon.	The proposed Hospital Staging Yard would be located approximately 2.7 miles northeast of the mixed-use building.	Under Construction	INA	None

Project Name and Type	Project Description and Location	Proximity to the Proposed Project Area	Project Status	Anticipated Construction Schedule	Construction Overlap?
Ventasso Battery Energy Storage System	Construction of a 50-megawatt battery energy storage system at an existing approximately 5.48-acre industrial site at 203 North Johnson Avenue in the City of El Cajon.	The proposed Hospital Staging Yard would be located approximately 3 miles northeast of the battery energy storage system construction.	Planned	INA	Potential
El Cajon Transit District Specific Plan (TDSP)	Plan describing 10 land use designations within the planning area, which are anticipated to result in a residential unit yield of approximately 2,803 units at full buildout, providing a net increase of 1,849 potential residential units and a decrease in industrial designated lands by approximately 21 acres over the existing theoretical buildout per the General Plan land use map.	The proposed Hospital Staging Yard would be located approximately 2.9 miles northeast of the eastern end of the TDSP planning area.	Planned	INA	Potential

Sources: Caltrans 2025; City of El Cajon 2025; County of San Diego Parks and Recreation (County Parks) 2020, 2022, 2025; County of San Diego Department of Public Works 2022, 2024, 2025; State of California 2025a, 2025b, 2025c; Sweetwater Authority 2025

Like the Proposed Project, the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would have temporary impacts on views during construction due to the presence of equipment, materials, and crews. This cumulative analysis considers a 0.5-mile radius to capture the immediate viewshed surrounding the Proposed Project. No Current and Future Projects would be visible from the key observation points (KOPs) identified in Section 3.1 Aesthetics. The Loveland Reservoir Recreation Program Repairs Plan would apply to areas in the vicinity of KOPs 7 and 10. However, at this time, there are no planned or proposed projects associated with the Loveland Reservoir Recreation Program Repairs Plan in areas that could be viewed from KOPs 7 and 10. Only the proposed Greenfield Staging Yard and Hospital Staging Yard would be located within 0.5 mile of identified Current and Future Projects, and no views of scenic vistas would be impacted by the proposed Greenfield Staging Yard and Hospital Staging Yard as they are surrounded by residential homes and/or commercial buildings.

The primary viewers in the area of the proposed staging yards and the Current and Future Projects would be residents and motorists, whose views of the proposed staging yards and Current and Future Projects would likely be obstructed by residential homes and/or commercial buildings surrounding the proposed Greenfield Staging Yard and Hospital Staging Yard. Few vantage points, if any, would enable a resident or motorist to view a proposed staging yard and Current or Future Project simultaneously. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to views of scenic vistas or the visual character or quality of public views during construction.

Once construction has been completed, the proposed staging yards would not be used for O&M of the Proposed Project. O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact to views of scenic vistas or the visual character or quality of public views.

During Proposed Project construction, glare from construction equipment could occur depending on the time of day and the position of the viewer relative to the construction equipment. This cumulative analysis considers a 0.5-mile radius to capture the immediate viewshed surrounding the Proposed Project. Only the proposed Greenfield Staging Yard and Hospital Staging Yard would be located within 0.5 mile of the identified Current and Future Projects. At the staging yards, temporary lighting may be installed as a security measure. Temporary lighting, if required, would typically be provided by portable light plants. Applicant-Proposed Measure (APM) AES-04 would apply to the staging yards, directing lighting at the yards to reduce escape of light and making it unlikely that lighting from the Proposed Project would combine with lighting from any Current and Future Projects. Due to the transient (i.e., glare from equipment and materials in-transit to and from staging yards) and ephemeral nature of the glare, it is unlikely that the glare from Proposed Project construction equipment would combine with glare from any Current and Future Projects construction equipment. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to light and glare. Once construction is complete, the proposed staging yards would not be used during O&M of the Proposed Project. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to light and glare.

4.3.2 Agriculture and Forestry

A cumulatively considerable impact to agriculture and forestry would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact the loss of forest land or farmland or convert forest or farmland to non-forest or non-farm uses. At the project level, the Proposed Project would not impact Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; existing zoning for agricultural use; existing Willams Act contracts; or zoning of forest lands. Therefore, cumulative impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance; existing zoning for agricultural use; existing Willams Act contracts; or zoning of forest lands are not analyzed.

None of the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located within the CNF or mapped forestland. Therefore, construction and O&M of the Current and Future Projects would not remove trees in forestland or convert forestland to non-forest uses. Construction and O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the loss of forest land or conversion of forest land to non-forest use would occur.

No Proposed Project access routes, structures, or other improvements would be developed in proximity to Important Farmland that could facilitate incompatible development. Limited vegetation removal may occur in forest lands during construction of the Proposed Project and SDG&E would implement a Habitat Restoration Plan to avoid or minimize impacts. None of the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located within the CNF or mapped forestland. The construction and O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact that could lead to the conversion of Important Farmland or forest land.

4.3.3 Air Quality

A cumulatively considerable impact to air quality would result if the Proposed Project's effects combine with the effects of one or more Current and Future Projects to obstruct or conflict with the implementation of an applicable air quality plan, increase criteria air pollutants (CAPs), expose sensitive receptors to pollutant concentrations, or release other emissions that would adversely impact a substantial number of people. At the project level, the Proposed Project would not impact air quality plans. Therefore, cumulative impacts to air quality plans are not analyzed. O&M of the Proposed Project would not impact substantial pollutant concentrations or lead to odors that would impact sensitive receptors at the project level; as a result, cumulative impacts from O&M to substantial pollutant concentrations or odors are not analyzed.

Uncontrolled emissions from Proposed Project construction would exceed the applicable threshold for particulate matter with a mean diameter of less than 10 microns, which has a state-level designation of nonattainment within the San Diego Air Pollution Control District (SDAPCD). All other emissions would be below applicable thresholds. To reduce these construction emissions, fugitive dust emissions would be reduced in compliance with applicable air district rules and regulations. With the implementation of the APM, Proposed Project controlled construction emissions would not exceed the significance thresholds for any CAPs.

The County's 2007 Guidelines for Determining Significance for Air Quality establish the following guidelines for determining a cumulatively considerable net increase in pollutants during construction:

- "A project that has a significant direct impact on air quality with regard to emissions of PM_{10}, $PM_{2.5}$, NO_X and/or VOCs, would also have a significant cumulatively considerable net increase."

- "In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the guidelines identified in Section 4.2 of this document."

As previously described, the Proposed Project would not result in a significant direct impact on air quality during construction as the significance thresholds for CAPs would not be exceeded. CAP emissions from Proposed Project construction could still combine with CAP emissions from Current and Future Projects to exceed SDAPCD guidelines and result in a cumulative net increase in any CAP for which the region is nonattainment under an applicable air quality standard. Any such potential cumulative impact would be less-than-significant as the Proposed Project would control CAP emissions to be below the threshold of significance at the project-level and Current and Future Projects undergoing discretionary environmental review would be anticipated to implement measures to control emissions. Pollutants from the Proposed Project construction would be unlikely to combine with pollutants from Current and Future Projects to create a substantial concentration at sensitive receptors as the proposed 230 kV transmission line work areas would be located more than 0.6 mile from Current and Future Projects and the existing Suncrest Substation is located over 2 miles from any Current and Future Projects. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to exposing sensitive receptors to substantial pollutant concentrations.

The County's 2007 Guidelines for Determining Significance for Air Quality establish the following guidelines for determining a cumulatively considerable net increase in pollutants during O&M:

- "A project that does not conform to the RAQS [Regionals Air Quality Strategy] and/or has a significant direct impact on air quality with regard to operational emissions of PM_{10}, $PM_{2.5}$, NO_X and/or VOCs, would also have a significant cumulatively considerable net increase."

- "Projects that cause road intersections to operate at or below a LOS [Level of Service] E[2] (analysis only required when the addition of peak-hour trips from the proposed project and the surrounding projects exceeds 2,000) and create a CO "hotspot" create a cumulatively considerable net increase of CO."

[2] Intersections operating at or below LOS E indicate high levels of congestion.

O&M of the Proposed Project would not conflict with RAQS or have a significant direct impact on air quality as Proposed Project O&M emissions would be below the significance thresholds for CAPs. Further, O&M would require one trip per year by crews of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck. The few vehicles and infrequency of the trips during Proposed Project would not cause road intersections to operate at or below LOS E. New residential and commercial developments could introduce new vehicles or redistribute vehicles in the area. However, the proposed 230 kV transmission line and existing Suncrest Substation, which will be the sites of O&M activities for the Proposed Project, would not be located on the same roadways as any of the identified current and future residential or commercial developments. Therefore, vehicles from O&M of the Proposed Project are not anticipated to combine with vehicles from Current and Future Projects to cause intersections to operate at or below LOS E and create a CO hotspot. Further, it is unlikely that vehicle emissions from Current and Future Projects would combine with any emissions from the Proposed Project's O&M activities and concentrate at a sensitive receptor as Current or Future Project vehicles are not anticipated to park and idle adjacent to the proposed 230 kV transmission line or existing Suncrest Substation due to their locations from the proposed 230 kV transmission line or existing Suncrest Substation. O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact to a net increase in any CAP for which the region is nonattainment under an applicable air quality standard.

Odors disperse rapidly with distance. If construction of the identified Current and Future Projects overlapped with construction of the Proposed Project, it is unlikely that odors from the Proposed Project and Current and Future Projects would combine due to the location of the Current and Future Projects being located more than 0.6 mile from the proposed 230 kV transmission line and more than 2 miles from the existing Suncrest Substation. Only 10 sensitive receptors are within 300 feet of the Proposed Project, which would not be considered a substantial number. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to emissions that lead to odors.

4.3.4 Biological Resources

A cumulatively considerable impact to biological resources would result if the Proposed Project's impacts combine with the impacts of one or more Current and Future Projects to sensitive habitat or species; sensitive habitat/natural communities; wildlife movement corridors; or the implementation of a Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state conservation plans. At the project level, the Proposed Project would not impact local policies, ordinances, and plans protecting biological resources. Therefore, cumulative impacts to existing policies, ordinances, or plans are not analyzed.

As discussed in Section 3.5 Biological Resources, all impacts to special-status plant and wildlife species associated with the Proposed Project construction would be avoided, minimized, or mitigated to a less-than-significant level with the implementation of take permit conditions of approval, Proposed Project MMs and APMs. Impacts to sensitive species and habitats during construction would be temporary and intermittent in nature (lasting only as long as construction work at a given site) and would be limited in their potential geographic scope. Current and Future Projects could impact special-status species where those projects' activities occur in the

presence or habitat of special-status species. The following Current and Future Projects would be located in critical habitat for sensitive species:

- SHOPP ID 20304 would be located in arroyo toad critical habitat.
- Alpine County Park would be located in Hermes copper butterfly critical habitat.
- Sycuan-Sloane Canyon Trail would be located in California coastal gnatcatcher critical habitat.

The majority of the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project are either located within the City of El Cajon or they are County infrastructure improvements, such as improvements to roads, sidewalks, and drainage systems. Due to the built environment of the City of El Cajon where some of the Current and Future Projects take place and infrastructure in the County, minimal impacts to sensitive habitat or species are anticipated from such Current and Future Projects. The Alpine County Park and Sycuan-Sloan Canyon Trail could impact wildlife or vegetation due to their location in less urbanized areas. The Current and Future Projects, including Alpine County Park and Sycuan-Sloan Canyon Trail, would be expected to comply with applicable federal and state regulations to avoid, minimize, and mitigate for impacts to special-status wildlife and plant species. Construction of the Proposed Project would result in an incremental contribution to impacts to sensitive species or their habitats. The cumulative impact to sensitive species or their habitats would not be cumulatively considerable; therefore, the impact would be less than significant.

The majority of Proposed Project O&M activities would be periodic, infrequent, and unlikely to occur at the same time as O&M activities for Current and Future Projects. Operations and maintenance of the Proposed Project would result in an incremental contribution to impacts to sensitive species or their habitats. The cumulative impact to sensitive species or their habitats would not be cumulatively considerable; therefore, the impact would be less than significant.

To avoid and minimize potential impacts to riparian habitat or other sensitive natural communities from construction activities, the Proposed Project would implement MMs and APMs described in Section 3.5 Biological Resources. Pre-construction biological surveys would be conducted in accordance with APM BIO-01. In addition, in accordance with APM BIO-04, all work areas within the Proposed Project area would be clearly delineated prior to construction commencing with fencing, staking, or flagging. In accordance with APM BIO-05, a Worker Environmental Awareness Program (WEAP) training would be provided to educate SDG&E personnel and contractors on species and implementation of protective measures. As previously described, the majority of the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project are located within the City of El Cajon or are County infrastructure improvements and therefore are anticipated to have minimal impacts to riparian habitat or other sensitive communities. Further, the identified Current and Future Projects would be located more than 0.6 mile from the Proposed Project work areas and more than 2 miles from the existing Suncrest Substation and thus would not impact the same locations during construction. All Current and Future Projects would be expected to comply with applicable regulations and implement measures to avoid and minimize impacts to sensitive natural communities. Construction of the Proposed Project would result in an incremental contribution to impacts to riparian habitat or other sensitive natural communities. The cumulative

impact to riparian habitat or other sensitive natural communities would not be cumulatively considerable; therefore, the impact would be less than significant.

The majority of Proposed Project O&M activities would be periodic, infrequent, and unlikely to occur at the same time as O&M activities for Current and Future Projects. Once constructed, O&M activities for the Current and Future Projects are anticipated to result in minimal ground disturbance and/or occur within the boundaries of their construction disturbance footprints, which would not overlap with the Proposed Project Area. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to riparian habitat or other sensitive natural communities.

No direct impacts to jurisdictional aquatic features are anticipated as the Proposed Project components have been sited and designed to avoid direct impacts to them and their hydrology. This has included the use of trenchless crossing methods or by spanning these aquatic features. While direct impacts would be avoided, the potential for indirect impacts to aquatic features still exists. Indirect impacts may be caused by potential erosion from ground-disturbing activities and the discharge of pollutants from construction workspaces and access roads, which may result in degradation of the water quality and natural hydrology of these features. SDG&E would implement the APMs included in Section 3.11 Hydrology and Water Quality to avoid and minimize potential impacts to jurisdictional aquatic features. O&M activities would occur in existing or new ROWs and would be small in size and short in duration and occur primarily within previously disturbed areas. The Current and Future Projects would also be subject to regulations that require compliance with water quality standards, including federal, state, and local water quality regulations during construction and O&M. Compliance with existing laws, ordinances, regulations, and standards in place for the protection of water quality are designed to address potential effects at a regional level and, therefore, are designed and intended to mitigate potential adverse effects resulting from multiple discrete projects or locations (i.e., cumulative impacts). Construction and O&M of the Proposed Project would result in an incremental contribution to effects on state or federally protected wetlands. The cumulative impact to a substantial adverse effect on state or federally protected wetlands would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project's direct and indirect impacts to wildlife movement would be avoided and minimized by implementing a variety of APMs. The Proposed Project would not create a barrier for species movement within riparian corridors and would have nominal indirect impacts within these corridors. SDG&E would implement APM BIO-17 and design the proposed 230 kV transmission lines and other Proposed Project components in compliance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 to minimize impacts to migratory birds and the risk of increased predation from raptors due to increased perching opportunities. SDG&E would implement APM BIO-05 to train workers about ESAs within the Proposed Project Area and to conduct construction in a manner that avoids and minimizes impacts on riparian movement corridors. Sensitive resources would be delineated and avoided to the extent practicable in accordance with APM BIO-01 and BIO-04, and construction activities within suitable habitat for special-status species would require monitoring by a qualified biologist per APM BIO-03. All vegetation removal and brush and weed control activities would adhere to APMs BIO-14 through BIO-16 to not adversely impact habitat. Dust would be minimized in compliance with applicable air district rules and regulations as described in Section

3.4 Air Quality, which would minimize dust from settling onto vegetation. Construction noise that could contribute to increased wildlife stress and decreased suitability of habitat would be restricted to a set schedule, in accordance with APM NOI-01 as described in Section 3.14 Noise. The identified Current and Future Projects would be located more than 0.6 mile from the Proposed Project work areas and more than 2 miles from the existing Suncrest Substation. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the movement of wildlife.

Once constructed, the Proposed Project poles would occupy small (i.e., a pole base size of up to 6 feet in diameter), geographically dispersed areas that terrestrial wildlife could move around. New poles and lines, however, could result in a risk of collisions for birds, interfering with the movement of individuals or flocks. To avoid impacts to avian movement new Proposed Project structures and conductor would be designed in compliance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006, 2012) or similar new technology, reducing potential impacts to avian movement to a less-than-significant level. The majority of the Current and Future Projects within 3 miles of the proposed 230 kV Overhead (OH) Segment are County infrastructure improvements that would not result in a change in the existing conditions to wildlife movement including birds once completed. Other Current and Future Projects within 3 miles of the proposed 230 kV OH Segment are the Alpine County Park, Sycuan-Sloan Canyon Trail, and Lake Jennings Marketplace Commercial Development. The Alpine County Park and Sycuan-Sloan Canyon Trail projects would maintain wildlife corridors and open areas. Any fencing installed in the Alpine County Park is anticipated to be minimal, would surround sport courts and fields, and would not interfere with wildlife corridors. The Lake Jennings Marketplace Commercial Development would be located in an urbanized setting. The Proposed Project O&M activities would be periodic, infrequent, and unlikely to occur at the same time as O&M activities for Current and Future Projects. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the movement of wildlife.

The Proposed Project would be located within the boundaries of several HCPs, NCCPs, and other approved local conservation plans. The Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project that would be located within the City of El Cajon are within urban, anthropogenically disturbed areas. As a result, impacts to wildlife or vegetation from Current and Future Projects within the City of El Cajon would be unlikely to impact the implementation of an HCP, NCCP, or other approved conservation plan.

Within unincorporated San Diego County, the majority of the Current and Future Projects are improvements to existing infrastructure that would occur within a previously disturbed and often paved area. Impacts to the implementation of an HCP, NCCP, or other approved conservation plan would be unlikely from such maintenance of the Current and Future Projects. The Lake Jennings Marketplace Commercial Development would be located in an urbanized setting, and impacts to implementing an HCP, NCCP, or other approved conservation plan from a Current or Future Project in an urbanized setting would be none to minimal. The Alpine County Park and Sycuan-Sloan Canyon Trail projects would be located within open space areas and could impact wildlife or vegetation that HCPs, NCCPs, or other approved conservation plans seek to conserve. It is anticipated that any Current and Future Projects, including Alpine County Park and Sycuan-

Sloan Canyon Trail, would comply with applicable regulations to avoid, minimize or mitigate impacts to special-status wildlife and plant species. Construction of the Proposed Project would result in an incremental contribution to any conflicts with an HCP, NCCP, or other approved conservation plan. The cumulative impact to conflicts with an HCP, NCCP, or other approved conservation plan would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project O&M activities would be periodic, infrequent, and unlikely to occur at the same time as O&M activities for Current and Future Projects. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the implementation of an HCP, NCCP, or other approved conservation plan.

The potential for new collision and electrocution risk from the Proposed Project would be limited to the proposed 230 kV OH segment. During construction, the risk of collision would occur during wire stringing. During the O&M phase of the Proposed Project, the operation of the proposed 230 kV OH segment would pose a collision and electrocution risk. The Proposed Project would be designed to follow the intent of Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006, 2012), thereby reducing potential impacts to collision or electrocution risk for avian or bat species. The Current and Future Projects in the vicinity of the proposed 230 kV OH segment that are improvements to existing infrastructure would not introduce new collision risks or features that would cause electrocution. The Alpine County Park and Sycuan Canyon Trail projects are not anticipated to introduce any features that could cause electrocution or be of sufficient height to pose a substantial risk of collision (i.e., the Alpine County Park may have some fencing around the pickleball courts or basketball court, but such fencing is unlikely to pose an obstruction for birds). The Lake Jennings Marketplace Commercial Development, depending on the final design of the buildings, could introduce reflectivity from glass windows that could create a risk of collision for birds and bats. However, the Lake Jennings Marketplace would be located approximately 2 miles north of the proposed 230 kV OH Segment and thus, from a geographical standpoint, would not directly combine with the Proposed Project's impacts to collision and electrocution risk. Construction and O&M of the Proposed Project would result in an incremental contribution to a substantial collision or electrocution risk for birds or bats. The cumulative impact to conflicts with a substantial collision or electrocution risk for birds or bats would not be cumulatively considerable; therefore, the impact would be less than significant.

4.3.5 Cultural Resources

A cumulatively considerable impact to cultural resources would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to directly or indirectly impact significant historical or archaeological resources and/or inadvertently discovered human remains. At the project level, O&M of the Proposed Project would result in no impact to cultural resources or human remains; as a result, cumulative impacts from O&M to cultural resources or human remains are not analyzed.

The Proposed Project would avoid known historical resources and archaeological resources as feasible through spanning the resources or redesign. If full avoidance is determined to be infeasible, the historic or archaeological resources would be fully evaluated for California Register of Historical Resources eligibility and a treatment plan implemented if significant. If an

archaeological resource is discovered inadvertently during construction, work would be halted in the immediate area to allow evaluation of the resource and development of appropriate treatment measures, in accordance with APM CUL-06. If human remains are inadvertently discovered during construction activities, all work would halt within a 50-foot radius of the remains discovered on the Proposed Project in accordance with APM CUL-07. SDG&E would follow applicable regulations and contact the County coroner. If remains are determined to be Native American or other Native American cultural items are uncovered on federal land, the remains would be treated in accordance with the Native American Graves Protection and Repatriation Act. Work would remain suspended in the area of the find until treatment options are identified.

While Current and Future Projects could also encounter subsurface resources or remains or above ground resources such as built environment resources, compliance with existing statutory provisions, regulations, as well as standard MMs, are anticipated to reduce project-level potentially significant impacts to less-than-significant levels. In addition, impacts to cultural resources are site-specific, and as such are not expected to combine with the development of the Current and Future Projects at any particular location. The Current and Future Projects do not geographically overlap with the Proposed Project work areas or structures or any of the known cultural resources identified in surveys for the Proposed Project. Four Current and Future Projects would be located within 1 mile of two historic homes (1998 Valley Rim Road and 2049 Vista Valley Rim Place) identified within the visual, auditory, and atmospheric portion of the study area for the Proposed Project. The following Current and Future Projects would be located within 1 mile of the historic homes:

- Shadow Mountain Subdivision Residential Development
- Shadow Mountain Sports Field Modifications
- St. Madeleine Sophie's Center
- 380 Vista Abierta Storm Drain

The closest Proposed Project component to the two historic homes is the proposed Greenfield Staging Yard. The proposed Greenfield Staging Yard and Current and Future Projects would not combine to create a cumulative visual impact to the historic homes as the Current and Future Projects would be located southeast of the proposed Greenfield Staging Yard and over 0.4 mile southeast of the historic homes. The proposed Greenfield staging yard would be used temporarily and is not a permanent fixture. The proposed Greenfield Staging Yard may be used as a refueling area for vehicles and construction equipment; an equipment wash station; assemblage of poles and other Proposed Project components; storage of material and equipment, storage containers, construction trailers, and portable restrooms; and for worker parking. As such, the proposed Greenfield Staging Yard would not be an appreciable source of vibration, erosion, dust, or runoff. As the Current and Future Projects would be located over 0.4 mile from the historic homes, the proposed Greenfield Staging Yard would be unlikely to combine with vibration, erosion, dust, or runoff from the Current and Future Projects to adversely impact the historic homes. Construction of the Proposed Project and Current and Future Projects would not be anticipated to result in a cumulative impact to cultural resources.

4.3.6 Energy

A cumulatively considerable impact to energy would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to cause the wasteful, inefficient, or unnecessary consumption of energy. At the project level, the Proposed Project would not conflict with state or local plans for renewable energy or energy efficiency. Therefore, cumulative impacts to state or local plans are not analyzed.

Although information could not be obtained for the electricity or fuel use during construction of the Current and Future Projects, it is likely that energy consumption during construction of Current and Future Projects would not be wasteful, inefficient, or unnecessary as the consumption would be needed for the completion of construction of the Current and Future Projects. Construction of the Proposed Project would use fuel and energy in an efficient and conservative manner over the 5-year construction period. Energy consumption of the Proposed Project and Current and Future Projects would result in only a less-than-significant cumulative impact to the wasteful, inefficient, or unnecessary consumption of energy. For instance, multiplying the Proposed Project's total fuel consumption by a factor of 50 would still result in only a fraction of annual fuel use in California. Similarly, electricity use during construction of the Proposed Project and Current or Future Project would likely represent a fraction of California's annual electricity consumption, which was 282,783 Gigawatt hours (GWh) in 2024, as typical construction equipment requiring electricity includes construction trailers, lighting, and other equipment. According to the California Energy Commission (CEC), the County consumed 19,111 Gigawatt hours of electricity in 2024 (CEC 2025a). As typical construction equipment requiring electricity includes construction trailers, lighting, and other equipment, it is anticipated that the electricity consumption of the Proposed Project and Current and Future Projects would constitute a fraction of annual County electricity consumption. Diesel fuel consumption was not available, but sales can be used as a proxy for consumption. In 2024, an estimated 113 million gallons of diesel fuel were sold in the County (CEC 2025b). The total diesel consumption over the duration of construction of the Proposed Project would be 941,533 gallons. If annual average diesel consumption of the Proposed Project is assumed to be 188,306 gallons, then the annual diesel fuel consumption of the Proposed Project combined with four other Current and Future Projects with that same level of annual diesel fuel consumption would still constitute only a fraction of the annual County diesel fuel sales. As a result, electricity and diesel fuel consumption from the Proposed Project and Current and Future Projects is anticipated to constitute a fraction of electricity and fuel consumption in the County. Construction of the Proposed Project would result in an incremental contribution to the wasteful, inefficient, or unnecessary consumption of energy. The cumulative impact to the wasteful, inefficient, or unnecessary consumption of energy would not be cumulatively considerable; therefore, the impact would be less than significant.

Of the Current and Future Projects, commercial and residential developments are anticipated to consume energy during their operational phase. Non-residential development projects would be required to adhere to California Green Building Standards Code Part 11, Title 24 and non-residential and residential buildings would be required to follow the California Energy Code, which establish performance requirements for buildings that reduce the inefficient consumption of energy (CEC 2025c and California Department of General Services 2025). Operations and maintenance activities for the Proposed Project would require 1 trip per year by crews of 2

people and two to three trucks, a boom or line truck, an aerial-lift truck, and an assist truck; and fuel use is thus anticipated to be negligible. Operations and maintenance of the Proposed Project would result in an incremental contribution to the wasteful, inefficient, or unnecessary consumption of energy. The cumulative impact to the wasteful, inefficient, or unnecessary consumption of energy would not be cumulatively considerable; therefore, the impact would be less than significant.

4.3.7 Geology, Soils, and Paleontological Resources

A cumulatively considerable impact to geology and soils would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to exacerbate risks associated with seismic activity, unstable soils, or lateral spreading. A cumulatively considerable impact to paleontological resources would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact significant resources, sites, or unique geologic features. At the project level, the Proposed Project would not impact the soil's ability to adequately support use of a septic tank or alternative wastewater disposal system and therefore cumulative impacts are not analyzed. The Proposed Project also would not impact a unique paleontological resource or site or unique geological feature at the project level; as a result, cumulative impacts to these issues are not analyzed. At the project level, O&M of the Proposed Project would not be impacted by a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, landslide, lateral spreading, subsidence, collapse, soil erosion, or the loss of topsoil; as a result, cumulative impacts during O&M from seismic hazards are not analyzed.

The Proposed Project would not cross any active or potentially active faults but would be located within 10 miles of potentially active faults and thus susceptible to earthquake forces and seismic shaking. The Proposed Project would cross County-designated liquefaction areas and areas mapped by the USGS as having landslide potential. The Proposed Project would be designed to be consistent with CPUC GO 95 and the geotechnical engineering report prepared in accordance with APM GEO-01. The Proposed Project would incorporate standard engineering practices and recommendations from the geotechnical engineering report to reduce seismic-related risks to the structures and avoid the installation of the Proposed Project structures on unstable soils. Imported fill and/or topsoil would be used to backfill trenches, which would stabilize the existing geologic conditions and reduce the potential for movement resulting from unstable geologic units. The Current and Future Projects would also be required to adhere to design and engineering standards and implement recommendations from geotechnical investigations. The Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would not overlap with any of the proposed ground disturbance areas of the Proposed Project. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, landslide, lateral spreading, subsidence, or collapse.

Areas temporarily impacted by construction could result in the loss of topsoil if it is present in work areas. Similarly, areas permanently impacted by construction would result in the loss of topsoil if it exists in permanent impact areas. SDG&E would develop and implement a Storm Water Pollution Prevention Plan (SWPPP) and adhere to SDG&E's Best Management Practices

(BMPs) Manual for Water Quality Construction to minimize erosion from the Proposed Project. The SWPPP and associated BMPs would be implemented to minimize soil erosion during Proposed Project construction and to reduce impacts to a less-than-significant level. The Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would not combine with the erosion or topsoil loss effects of the Proposed Project because they would not geographically overlap with the work areas of the Proposed Project. Construction of the Proposed Project would result in an incremental contribution to soil erosion or the loss of topsoil. The cumulative impact to soil erosion or the loss of topsoil would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project would cross soils classified as Hydrologic Group D, which is characterized by high clay content that could exhibit shrink-swell characteristics. In accordance with APM GEO-01, recommendations from the geotechnical engineering report (e.g., increasing pole depths) would be incorporated into the design if expansive soils are identified where the poles would be located. Therefore, the structures are anticipated to be buried below expansive soils, as defined in the 1994 Uniform Building Code. The underground segments of the Proposed Project would be encased in a concrete duct bank and not susceptible to potentially expansive soils. It is anticipated that the Current and Future Projects would take similar measures to avoid locating structures on expansive soils or adhere to uniform design and engineering standards. The Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would not overlap with any of the proposed ground disturbance areas of the Proposed Project. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to substantial risks to life or property.

The Proposed Project O&M activities would not involve substantial ground disturbance or installation of new structures. Similarly, once constructed, O&M activities for the Current and Future Projects are anticipated to result in minimal ground disturbance and/or occur within the boundaries of their construction disturbance footprints, which would not overlap with the Proposed Project. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to posing substantial risks to life or property.

4.3.8 Greenhouse Gas Emissions

A cumulatively considerable impact to GHG emissions would result if the Proposed Project's effects would combine with the effects of one or more Current and Future Projects to generate GHG emissions that may have a significant impact on the environment. At the project level, the Proposed Project would not impact GHG reduction plans, policies, or regulations. Therefore, cumulative impacts to GHG reduction plans, policies, or regulations are not analyzed.

The SDAPCD has not established quantitative CEQA GHG thresholds of significance for construction or mobile source-related emissions. However, the County's 2015 Greenhouse Gas Guidance includes a suggested "bright line" screening-level threshold for projects of 900 metric tons of carbon dioxide equivalent ($MTCO_2e$) based on the California Air Pollution Control Officers Association's identified screening threshold. The County's 2015 Greenhouse Gas Guidance identifies that a project would result in a less-than-significant cumulatively considerable impact if the project's emissions do not exceed 900 $MTCO_2e$ (County of San Diego Planning and Development Services 2015). The guidance document indicates that construction emissions may be amortized over an assumed 20-year life of a project. The total emissions

during Proposed Project construction would be approximately 14,442 $MTCO_2e$. When amortized over an assumed 20-year life, the Proposed Project's construction emissions are reduced to approximately 722.1 $MTCO_2e$, which is well below the threshold of 900 $MTCO_2e$. Annual total emissions during Proposed Project O&M would also be well below the County's threshold of 900 $MTCO_2e$. Construction and O&M of the Proposed Project would result in an incremental contribution to generating GHG emissions. The cumulative impact to GHG emissions would not be cumulatively considerable; therefore, the impact would be less than significant.

4.3.9 Hazards and Hazardous Materials

A cumulatively considerable impact to hazards and hazardous materials would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact the release, transport, use, or disposal of hazardous materials, substances, or waste. Additionally, a cumulatively considerable impact would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact wildland fires or emergency services. At the project level, the Proposed Project would not impact hazardous emissions or materials within 0.25 mile of an existing or proposed school; creation of a significant hazard to the public or environment due to location on a hazardous materials site; or safety for people residing or working in the Proposed Project Area within an airport land use plan or 2 miles of a public airport; as a result, cumulative impacts for these issues are not analyzed. At the project level, O&M of the Proposed Project would not impair or interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, a cumulative impact from O&M to emergency response plans or emergency evacuation plans is not analyzed.

The Current and Future Projects listed in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project could involve hazards and hazardous materials similar to those identified for the Proposed Project; however, these Current and Future Projects would be required to follow applicable regulations for characterization, handling, and disposal of hazards or hazardous materials. The potential for upset, emergency, or other abnormal conditions involving the release of hazardous materials occurring on multiple projects simultaneously is very low. For the Proposed Project, SDG&E would implement its standard BMPs and maintain spill kits on site to minimize the potential for spills and respond to potential releases of hazardous materials. In addition, implementation of the WEAP in accordance with APM BIO-05 would provide SD&E personnel and contractors with training regarding the application of BMPs and compliance with federal and state regulations. Construction of the Proposed Project would result in an incremental contribution to the routine use, transport, storage, and disposal of hazardous. The cumulative impact to the public or the environment from the routine use, transport, storage, and disposal of hazardous materials or human health and the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would not be cumulatively considerable; therefore, the impact would be less than significant.

O&M of the Proposed Project would be conducted in accordance with SDG&E's existing O&M standards and would not appreciably increase the use of hazardous materials. As previously described, O&M of the Proposed Project would not upset, emergency, or other abnormal conditions occurring on multiple projects simultaneously is very low. Further, the Current and Future Projects would be located more than 0.6 mile from the proposed 230 kV transmission line and more than 2 miles from the existing Suncrest Substation. Operations and maintenance of the

Proposed Project and Current and Future Projects would not result in a cumulative impact to the public or the environment from the routine use, transport, storage, and disposal of hazardous materials or human health and the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

Construction of the Proposed Project would have a less-significant-impact on the implementation of or physical interference with an adopted emergency response or evacuation plan. As described in Section 4.3.17 Transportation, installation of the proposed 230 kV western UG segment would require temporary lane closures on County-identified evacuation routes (e.g., La Cresta Road and Mountain View Road), and the proposed 230 kV OH segment may require temporary lane closures at locations that have not been identified.

The Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would not be located on La Cresta Road or Mountain View Road and thus are not anticipated to require lane closures at those locations. Like the Proposed Project, the Current and Future Projects would be required to coordinate with the County and emergency service providers through the encroachment permit process to provide proper notice of lane closures and implement all required traffic control measures. Simultaneous lane closures by the Proposed Project and Current and Future Projects could delay emergency access if a vehicle needs to take a detour or experiences delays from the Proposed Project's partial lane closures and any closures by Current and Future Projects, but the Proposed Project's temporary and partial lane closures (which would range from 40 to 500 feet along segments of roads) would only have an incremental and negligible contribution to cumulative impacts to emergency response or evacuation. Construction of the Proposed Project and Current and Future Projects would result in a less-than-significant cumulative impact to the implementation of or physical interference with an emergency response or evacuation plan. Construction of the Proposed Project would result in an incremental contribution to interfering with implementation of or physical interference with an emergency response or evacuation plan. The cumulative impact to implementation of or physical interference with an emergency response or evacuation plan would not be cumulatively considerable; therefore, the impact would be less than significant.

Cumulative impacts to wildfire are discussed in Section 4.3.20 Wildfire and were determined to be less than significant. Construction and O&M of the Proposed Project and Current and Future Projects would result in a less-than-significant cumulative impact to exposing people or structures to a significant risk of loss, injury, or death from wildland fires. Construction and O&M of the Proposed Project would result in an incremental contribution to exposing people or structures to a significant risk of loss, injury, or death from wildland fires. The cumulative impact to exposing people or structures to a significant risk of loss, injury, or death from wildland fires would not be cumulatively considerable; therefore, the impact would be less than significant.

4.3.10 Hydrology and Water Quality

A cumulatively considerable impact to hydrology and water would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact water quality, depletion of groundwater supplies, interference with groundwater recharge, or alterations to drainage patterns. At the project level, the Proposed Project would not conflict with the implementation of a water quality control plan or sustainable groundwater management plan;

as a result, cumulative impacts for these issues are not analyzed. Operations and maintenance of the Proposed Project would not impact groundwater supplies, groundwater recharge, or drainage patterns at the project level. Therefore, cumulative impacts from O&M to these issues are not analyzed.

Like the Proposed Project, the Current and Future Projects that would involve at least 1 acre of soil disturbance would require the preparation of a SWPPP per the National Pollutant Discharge Elimination System General Permit for Discharges of Stormwater Associated with Construction Activity. The Current and Future Projects would also be subject to regulations that require compliance with water quality standards, including state and local water quality regulations during construction and O&M. Compliance with existing laws, ordinances, regulations, and standards in place for the protection of water quality are designed to address potential effects at a regional level and, therefore, are designed and intended to mitigate potential adverse effects resulting from multiple discrete projects or locations (i.e., cumulative impacts). Construction and O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact to water quality standards; waste discharge requirements; or surface or groundwater quality.

Groundwater is not anticipated to be encountered during construction of the Proposed Project and similarly is not anticipated to be encountered during construction of the Current and Future Projects. Sweetwater Authority sources its water partially from the San Diego Formation Basin, and sustainable yield of groundwater from the San Diego Formation Basin is estimated to be 10,000-acre feet per year (Sweetwater Authority 2025; City of San Diego 2009). The Proposed Project would use an estimated 5 to 10 million gallons of water during construction for the 5-year construction period. If an average annual consumption of 2 million gallons per year for the Proposed Project during the 5-year construction period is assumed, then even the annual consumption of the Proposed Project combined with the consumption of fifteen other Current and Future Projects consuming 2 million gallons per year would only constitute a fraction of the annual sustainable yield for the San Diego Formation Basin. Further, SDG&E would confirm that the water sources used during construction would have adequate capacity prior to sourcing water from them. Construction of the Proposed Project would result in an incremental contribution to a decrease in groundwater supplies or interference with groundwater recharge. The cumulative impact to a substantial decrease in groundwater supplies or interference with groundwater recharge would not be cumulatively considerable; therefore, the impact would be less than significant.

Minor grading involved during construction would not substantially increase the existing velocity or volume of storm water flows either on site or in off-site areas. All temporary work areas disturbed during grading would be restored to their original contours, and the surrounding area would be restored and repaired, as appropriate. Permanent work areas would be designed to maintain existing flow patterns and flow velocities by outsloping and the use of rock energy dissipaters as needed. SDG&E would secure the required permits and comply with the terms of the permits to reduce impacts to existing drainage patterns and hydrology. It is anticipated that the Current and Future Projects would follow the standard practice of restoring temporary work areas disturbed during construction and that the Current and Future Projects would secure any required waters permits and comply with the terms of the permits. Further, the Current and Future Projects would be located more than 0.6 mile from the proposed 230 kV transmission line

poles and thus are unlikely to have storm water flows combine in a manner that would substantially alter existing drainage patterns due to the distance and variations in topography. Construction of the Proposed Project would result in an incremental contribution to altering drainage patterns. The cumulative impact to the substantial alteration of drainage patterns would not be cumulatively considerable; therefore, the impact would be less than significant.

Because the proposed 230 kV OH segment would span the relatively narrow area of a Federal Emergency Management Agency Zone AE flood zone along Harbison Canyon Road, and because no permanent structures would be installed within the flood zone itself, the risk of releasing pollutants due to Proposed Project inundation would be less than significant. Due to the location of the crossing of the proposed 230 kV OH segment in relation to the Current and Future Projects, it is unlikely that the Current and Future Projects would result in a discharge that would impact the same flood zone area as the Proposed Project. Construction and O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the risk of release of pollutants due to project inundation within a flood hazard zone.

4.3.11 Land Use and Planning

A cumulatively considerable impact to land use and planning would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to physically divide an established community. At the project level, the Proposed Project would not impact land use and planning. Therefore, cumulative impacts to land use and planning are not analyzed.

4.3.12 Mineral Resources

A cumulatively considerable impact to mineral resources would result if the Proposed Project's effects combine with the effects of one or more Current and Future Projects to impact the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. At the project level, the Proposed Project would not impact mineral resources. Therefore, cumulative impacts to mineral resources are not analyzed.

4.3.13 Noise

A cumulatively considerable impact to noise and vibration would result if the Proposed Project's effects would combine with the effects of one or more Current and Future Projects to exceed noise standards or create significant groundborne vibration. At the project level, the Proposed Project would not be located within the vicinity of a private air strip or airport land use plan or within 2 miles of a public airport or public use airport; as a result, cumulative impacts for these issues are not analyzed. At the project level, O&M of the Proposed Project would not impact excessive groundborne vibration or groundborne noise levels. Therefore, cumulative impacts from O&M for these issue are not analyzed.

Like the Proposed Project, Current and Future Projects would need to comply with the County noise ordinance during construction and O&M. The Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located more than 0.6 mile from the proposed 230 kV transmission line and more than 2 miles from the existing Suncrest Substation. Further, the Proposed Project work areas and transmission

infrastructure would be distributed across approximately 15 miles. In most cases when sound propagates over a long distance, the sound level will drop by approximately 6 A-weighted decibels with each doubling of distance, and therefore, low levels of Proposed Project noise are anticipated where the boundary of a Current or Future Project begins. Construction and O&M of the Proposed Project would not result in a cumulative impact to the generation of a substantial temporary or permanent increase in ambient noise levels in excess of applicable standards.

The use of a vibratory roller during paving activities would be the activity that results in the most groundborne vibration during construction. The closest sensitive receptors would be 30 feet from repaving activities that require a vibratory roller along Vista De Montemar, La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive, and groundborne vibration would only exceed the Federal Transit Administration's (FTA's) threshold of significance at the project level if the vibratory roller use occurs within 26 feet of a sensitive receptor. Therefore, at the project level, the Proposed Project would not exceed the FTA's threshold of significance. The closest Current or Future Project to the repaving activities using a vibratory roller would be St. Madeleine Sophie's Center, which is located approximately 0.9 mile southwest from the repaving activities along La Cresta Road. St. Madeleine Sophie's Center is current under construction and not anticipated to overlap with construction of the Proposed Project. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the generation of excessive groundborne vibration or groundborne noise levels.

4.3.14 Population and Housing

A cumulatively considerable impact to population and housing would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to displace a substantial number of existing people. At the project level, the Proposed Project would not impact unplanned population growth. Therefore, a cumulative impact to unplanned population growth is not analyzed.

The current alignment of the proposed 230 kV OH segment would span 1 home, and relocation of the resident may be required. Even if any Current and Future Projects displace people or housing, the Proposed Project may need to relocate occupants of 1 residential home. Construction of the Proposed Project would result in an incremental contribution to the displacement of substantial numbers of existing people or housing. The cumulative impact to the displacement of substantial numbers of existing people or housing would not be cumulatively considerable; therefore, the impact would be less than significant.

O&M of the Proposed Project would not displace any people and thus O&M of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the displacement of substantial numbers of existing people or housing.

4.3.15 Public Services

A cumulatively considerable impact to public services (e.g., fire and police protection) could result if the Proposed Project's effects combine with the effects of one or more Current and Future Projects to increase demand on public services facilities such that additional facilities must be constructed to maintain acceptable levels of service, and the construction of such

facilities would result in a physical impact on the environment. At the project level, the Proposed Project would not impact police protection. Therefore, a cumulative impact to police protection is not analyzed.

Fire protection services currently serve and would continue to serve the areas in and around the Proposed Project. Any temporary road closures from Proposed Project construction would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. Current and Future Projects proposing road closures would be required to comply with the encroachment permit process and all terms of the permits as well. The Proposed Project would implement SDG&E's Fire Prevention Plan in accordance with APM FIRE-01 to minimize the wildfire risk during construction. Current and Future Projects are anticipated to also implement wildfire risk reduction strategies and worker safety practices, and the probability of a Current or Future Project and the Proposed Project igniting a wildfire at the same time is low. The wildfire risk or risk of another emergency (i.e., medical) posed by the Proposed Project combined with the wildfire risk or risk of another emergency posed by Current and Future Projects would not necessitate the provision of or need for new or physically altered fire protection facilities. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the provision of or need for new or physically altered governmental facilities to maintain acceptable fire protection service ratios, response times, or other performance objectives.

The Proposed Project would implement vegetation management programs during O&M. Further, the Proposed Project is not anticipated to require medical emergency services from local fire services during O&M as it would be operated remotely and annual O&M trips would involve crews composed of two people and two to three trucks (i.e., a boom or line truck, an aerial-lift truck, and an assist truck). The Current and Future Projects could increase the demand for fire services as there are commercial and residential developments, but the scale of these developments would be unlikely to result in a significant impact. Operations and maintenance of the Proposed Project would result in an incremental contribution to the provision of or need for new or physically altered governmental facilities to maintain acceptable fire protection service ratios, response times, or other performance objectives. The cumulative impact to the provision of or need for new or physically altered governmental facilities to maintain acceptable fire protection service ratios, response times, or other performance objectives would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project would not require the expansion of public facilities, such as parks, hospitals, or libraries. No temporary park closures or temporary closures of roads that would impact access to parks are anticipated. Construction activities would be unlikely to impact other public facilities, such as hospitals and community centers, due to their distance from the Proposed Project and the scope of construction.

Construction of the proposed 230 kV western UG segment would occur along La Cresta Road, a potential route to access Crest School and the Crest Library. Any temporary road closures would be coordinated with local jurisdictions through the encroachment permit process and any required traffic control plans. The Current and Future Projects are not anticipated to result in access disruptions to Crest School or the Crest Library during construction due to their

locations,[3] and it is anticipated that the Current and Future Projects would take the necessary steps to mitigate impacts to public facilities access. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the provision of or need for new or physically altered government facilities to maintain acceptable service ratios, response times, or other performance objectives of schools, parks, or other public facilities.

O&M of the Proposed Project would be conducted in accordance with SDG&E's existing O&M standards implemented throughout the Proposed Project Area, and maintenance activities would continue as they currently do in the area. Operations and maintenance lane closures are not anticipated to occur on La Cresta Road. Further, the Current and Future Projects are not proposed to occur on La Cresta Road and are located more than 1 mile from Crest School and Crest Library. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the provision of or need for new or physically altered government facilities to maintain acceptable service ratios, response times, or other performance objectives of schools, parks, or other public facilities.

4.3.16 Recreation

A cumulatively considerable impact to recreation could result if the Proposed Project effects combine with the effects of one or more Current and Future Projects to increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. At the project level, no recreational facilities would be constructed and O&M would not require the construction or expansion of any recreational facilities in the future. Therefore, a cumulative impact to the construction or expansion of recreational facilities is not analyzed.

The Proposed Project would temporarily reduce access to recreation resources during construction. The proposed Sweetwater Staging/Fly Yard would occupy the eastern portion of the public parking lot for Loveland Reservoir for the duration of construction. The proposed 230 kV OH segment would cross the Loveland Reservoir Trail and CRHT, and portions of the trails would be temporarily closed during the 14-month construction period of the proposed 230 kV OH segment. The reduced parking lot capacity and trail segment closures may result in minor, increased use of other reservoirs or trails for the duration of construction. The majority of the Current and Future Projects in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would not be located in the vicinity of the Loveland Reservoir public parking lot, Loveland Reservoir Trail, or CRHT. The Loveland Recreation Program Repairs Plan described in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project, may include goals and policies that could spur future construction projects that may temporarily restrict access to the Loveland Reservoir parking lot, Loveland Reservoir Trail, and/or CRHT. Although unlikely to occur at the same time as construction of the Proposed Project, such projects could combine with the impacts of the Proposed Project to further reduce access to Loveland Reservoir, the Loveland Reservoir Trail, and/or CRHT if they did occur at the same time as Proposed Project construction. However, as only access to Loveland Reservoir, Loveland Reservoir Trail, and CRHT would be temporarily reduced, the access reduction would not result

[3] The Current and Future Projects are not proposed to occur on La Cresta Road and are located more than 1 mile from Crest School and the Crest Library.

in a significant increase in the use of existing parks or recreational facilities. Construction of the Proposed Project would result in an incremental contribution to the increased use of existing neighborhood and regional parks or other recreational facilities. The cumulative impact to the increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated would not be cumulatively considerable; therefore, the impact would be less than significant.

Proposed Project O&M would be infrequent and conducted by small crews, and O&M would not increase the use of existing neighborhood and regional parks or other recreational facilities. New residential developments could increase the use of existing parks and recreational facilities. However, only seven residential developments among the Current and Future Projects were identified within 3 miles of the proposed 230 kV transmission line and none within 3 miles of the existing Suncrest Substation, which would be the sites of the Proposed Project O&M activities. No residential developments were identified within 1 mile of the proposed 230 kV transmission line or existing Suncrest Substation. These Current and Future Projects that could introduce new residents are anticipated to generate a nominal increase in new users of parks in the 3-mile vicinity of the proposed 230 kV transmission line and Suncrest Substation, and Proposed Project O&M would not increase park use due to the infrequency of O&M trips and small crew size. Operations and maintenance of the Proposed Project and Current and Future Projects would not result in a cumulative impact to the increased use of existing neighborhood and regional parks or other recreational facilities.

4.3.17 Transportation

A cumulatively considerable impact to transportation would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact transportation plans, hazards, emergency access, or public transit.

No Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located on the same roads as the proposed 230 kV transmission line. The proposed Hospital Staging Yard would be located on East Main Street, and several Current and Future Projects (e.g., 1349 East Main Street Residential Development and 1050 East Main Street Residential Development) would also be located along East Main Street and their construction could potentially overlap with Proposed Project construction. The proposed Greenfield Staging Yard would be located on Greenfield Drive, as would the Shadow Mountain Sports Field Modifications and its construction could overlap with Proposed Project construction. Current and Future Projects would be required to implement similar traffic control measures required by the County, and construction zones must provide emergency vehicle access to and, if applicable, through the construction zone at all times. Construction traffic for the Proposed Project could combine with traffic from the Current and Future Projects. Any traffic increases during construction would be temporary and would not permanently affect transportation. Construction of the Proposed Project would result in an incremental contribution to a conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The cumulative impact to a conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would not be cumulatively considerable; therefore, the impact would be less than significant.

Once constructed, current and future residential and commercial developments could introduce new people to the area and thus a greater number of personal vehicles. If such Current and Future Projects are not exempt from CEQA, the transportation effects are anticipated to be evaluated by the County or other lead agency. It is anticipated that Current and Future Projects subject to CEQA would implement measures to reduce transportation-related impacts. The Proposed Project vehicle trips during O&M would be negligible and would only contribute a small number of vehicles to any vehicles introduced by the Current and Future Projects in San Diego County. Only a few commercial projects have been identified in Figure 4-1: Current and Future Projects within 3 Miles of the Proposed Project. Additionally, only seven residential developments among the Current and Future Projects were identified within 3 miles of the proposed 230 kV transmission line and none were identified within 3 miles of the existing Suncrest Substation, which are the Proposed Project components that would be subject to O&M activities. No residential developments were identified within 1 mile of the proposed 230 kV transmission line or existing Suncrest Substation. Operations and maintenance of the Proposed Project would result in an incremental contribution to a conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The cumulative impact to a conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would not be cumulatively considerable; therefore, the impact would be less than significant.

Construction of the Proposed Project would result in a daily average of approximately 5,975.8 vehicle miles traveled (VMT). As the daily average VMT for unincorporated San Diego County is 4,619, the Proposed Project would be above the daily average VMT in the unincorporated county. However, VMT from construction workers during construction of the Proposed Project would not represent newly generated traffic caused by construction of the Proposed Project, but rather a redistribution across the regional roadway network as workers travel to various work sites each day. VMT from construction workers traveling to and from the Current and Future Projects are likewise anticipated to constitute a redistribution of VMT rather than newly generated VMT. Depending on the location of construction workers' housing and work areas, redistributed VMT could increase or decrease. The majority of the Current and Future Projects would not be located on the same roads as the Proposed Project, VMT from Proposed Project construction and VMT from Current and Future Projects is not anticipated to combine to create a significant cumulative impact to VMT. Vehicles accessing the construction sites of Shadow Mountain Subdivision and Shadow Mountain Sports Field Modifications may use Greenfield Drive in the vicinity of the proposed Greenfield Staging Yard. Due to the scope of construction for these Current and Future Projects (i.e., addition of a 5,000-square-foot building, construction of a new sport field stands, and development of 23 residential lots), construction crews are not anticipated to be large, and the number of vehicles traveling to and from these Current and Future Projects construction sites are not anticipated to combine with vehicles traveling to and from the proposed Greenfield Staging Yard to create a significant cumulative impact. Construction of the Proposed Project would result in an incremental contribution to VMT. The cumulative impact to VMT would not be cumulatively considerable; therefore, the impact would be less than significant.

Once constructed, current and future residential and commercial developments could introduce new people to the area and thus a greater number of personnel vehicles. If such Current and Future Projects are not exempt from CEQA, the transportation effects are anticipated to be

evaluated by the County or other lead agency. It is anticipated that Current and Future Projects subject to CEQA would implement measures to reduce transportation-related impacts. Proposed Project vehicle trips during O&M would be negligible and would only contribute a small number of vehicles to any vehicles introduced by the Current and Future Projects. Operations and maintenance of the Proposed Project would result in an negligible contribution to VMT. The cumulative impact to VMT would not be cumulatively considerable; therefore, the impact would be less than significant.

Construction of the Proposed Project would involve operation and transport of heavy equipment on roads, which can be considered a short-term incompatible use. No hazardous geometric design features would be introduced during Proposed Project construction. Encroachment permits from the County would be secured as required; and corresponding traffic control plans would be prepared, approved by the County, and implemented prior to any lane closures. The Current and Future Projects would likewise be required to adhere to all requirements of any secured encroachment permits. Construction of the Proposed Project and Current and Future Projects would not result in a cumulative impact to substantially increasing hazards due to a geometric design feature or incompatible uses.

During O&M, the Proposed Project would not create incompatible uses as O&M trips would be infrequent and would not routinely require large equipment that could be considered an incompatible use on the road. No hazardous geometric design features would be introduced during Proposed Project O&M. The Current and Future Projects are not anticipated to introduce incompatible geometric design features. Maintenance that may be required for Current and Future Projects could require large equipment, but it is anticipated to be infrequent and unlikely to occur at the same time as any large equipment that could be required for emergency repairs of the Proposed Project during O&M. The regular use of large equipment is not anticipated during routine O&M activities for the Proposed Project. Operations and maintenance of the Proposed Project and Current and Future Projects would not contribute to a cumulatively considerable impact to substantially increasing hazards due to a geometric design feature or incompatible uses.

Locations of road closures for the proposed 230 kV OH segment are unknown at this time but would be 100 to 200 feet in length. La Cresta Road and Mountain View Road are both identified as potential evacuation routes, and both roads would likely require partial and temporary lane closures for the construction of the proposed 230 kV western UG segment. With the implementation of MM TRA-01, emergency service providers would be provided proper notice before the commencement of construction activities that would require lane closures. Furthermore, anticipated lane closures would not occur along any of the evacuation routes identified in the County's Alpine Evacuation and Protection Plan. None of the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would occur on La Cresta Road or Mountain View Road and thus are not anticipated to require any lane closures on these roads. If road or lane closures are required by the Current and Future Projects in other locations, those projects would be required to coordinate with the County and emergency service providers through the encroachment permit process to provide proper notice of lane closures. The Proposed Project's temporary lane closures would primarily impact emergency access within a consolidated geographic area rather than across a large area or in distinct locations because the roads are connected in a primarily east-west

alignment and the distance of lane closures for the proposed 230 kV UG segment would occur during construction for a distance of 40 to 500 feet. Construction of the Proposed Project would result in an incremental contribution to inadequate emergency access. The cumulative impact to inadequate emergency access would not be cumulatively considerable; therefore, the impact would be less than significant.

The proposed 230 kV OH Segment may require lane closures for maintenance. Dewatering of utility vaults along the proposed 230 kV western UG segment during O&M would require brief, partial lane closures in areas where vaults are installed within roadways. These partial lane closures would occur within Al Bahr Road and Canyon Rim Drive; however, neither of these roads are identified as a potential evacuation route by the County. Lane closures would be 100 to 200 feet in length. None of the Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would occur on Al Bahr Road or Canyon Rim Drive and thus are not anticipated to require any lane closures on these roads. Further, any lane closures required during O&M of Current and Future Projects are unlikely to occur at the same time as any lane closures by the Proposed Project due to the infrequent occurrence of Proposed Project O&M. Operations and maintenance of the Proposed Project would result in an incremental contribution to inadequate emergency access. The cumulative impact to inadequate emergency access would not be cumulatively considerable; therefore, the impact would be less than significant.

4.3.18 Tribal Cultural Resources

A cumulatively considerable impact to tribal cultural resources (TCRs) would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to create direct or indirect impacts to significant TCRs. At the project level, O&M of the Proposed Project would result in no impact to TCRs; as a result, cumulative impacts from O&M to TCRs are not analyzed.

No known TCRs were identified in the Proposed Project Area. In accordance with APM TRIB-01, inadvertent discoveries of tribal cultural resources during construction will halt operations within 50 feet, requiring immediate communication with the Native American monitor, Principal Investigator, and SDG&E's Cultural Resource Specialist, who will determine necessary actions in coordination with CPUC before resuming work. While the Current and Future Projects could also encounter TCRs, compliance with existing regulations, as well as standard MMs, are anticipated to reduce project-level potentially significant impacts to less-than-significant levels. The Current and Future Projects identified in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project do not geographically overlap with the Proposed Project work areas or structures, and potential TCR impacts are evaluated on a site-specific basis. Further, because no known TCRs were identified in the Proposed Project Area and the Current and Future Projects would be located more than 0.6 mile from the proposed 230 kV transmission line and more than 2 miles from the existing Suncrest Substation, cumulative visual, auditory, and atmospheric impacts from construction of the Proposed Project and Current and Future Projects to above ground TCRs is not anticipated to occur. Construction of the Proposed Project and Current and Future Projects would not result in cumulative impacts to TCRs.

4.3.19 Utilities and Service Systems

A cumulatively considerable impact to utilities or service systems would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact local utility services or infrastructure. At the project level, O&M of the Proposed Project would have no impact to relocated, new, or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities. As a result, cumulative impacts from O&M for these issues are not analyzed. Additionally, the Proposed Project would not impact compliance with federal, state, and local solid waste regulations at the project level. Therefore, a cumulative impact to federal, state, and local solid waste regulations is not analyzed.

In total, it is estimated that 5 million to 10 million gallons of water would be required on site during construction of the Proposed Project, accounting for 0.14 percent and 0.22 percent of Sweetwater Authority's and Padre Dam Municipal Water District's 2025 water supply, respectively. SDG&E would confirm that the water sources have adequate capacity prior to sourcing water from them. The projected water use for construction of Current and Future Projects was not available. However, even if seven Current and Future Projects were constructed at the same time as the Proposed Project and consumed the same amount of water during their construction as the Proposed Project, that would still only constitute a fraction of Sweetwater Authority's 2025 water supply and under 2 percent of Padre Dam Municipal Water District's 2025 water supply. Construction of the Proposed Project would result in an incremental contribution to water demand or relocating, requiring new, or expanding water facilities. The cumulative impact to water supplies or relocated, new, or expanded water facilities would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project would not require additional water sources for O&M activities beyond those currently used at the existing Suncrest Substation and the daily operation of the Proposed Project would not require water. Of the Current and Future Projects, new residential and commercial development are anticipated to be the primary consumers of water during their operational phase. Data could not be located for Sweetwater Authority service area's or Padre Dam Municipal Water District service area's per capita water use, but the San Diego County Water Authority's per capita per day water use statistics can be used as a proxy for per capita per day use for service areas in the County. In 2024, water consumption was approximately 113 gallons per capita per day (San Diego County Water Authority 2024). Even if the new residential and commercial developments identified among the Current and Future Projects introduced 1,000 new people to the area, which is not anticipated due to the scale of the Current and Future Projects, and each person consumed 113 gallons per day, that level of consumption would constitute a fraction of the 2025 water supply for Sweetwater Authority and Padre Dam Municipal Water District. Operations and maintenance of the Proposed Project would result in an incremental contribution to water demand or relocating, requiring new, or expanding water facilities. The cumulative impact to water supplies or relocated, new, or expanded water facilities would not be cumulatively considerable; therefore, the impact would be less than significant.

During Proposed Project construction, portable toilets would be used, and sanitary waste would be taken by the vendor to a sanitary waste facility for disposal. Sanitary waste would be transported by the licensed sanitary waste service providers for off-site disposal at their contracted treatment, storage, and disposal facility. No new or relocated permanent sewer

infrastructure would be required to accommodate sanitary waste produced during Proposed Project construction. The sanitary waste that would be generated during Proposed Project construction is estimated at 2,080 gallons per week per 40 workers on site. Construction of Current and Future Projects are similarly anticipated to transport and dispose of sanitary waste at off-site disposal locations with adequate capacity for the sanitary waste. Construction of the Proposed Project would result in an incremental contribution to relocating, requiring new, or expanding wastewater facilities or a determination that a wastewater treatment provider has inadequate capacity. The cumulative impact to new or expanded wastewater facilities or a determination that a wastewater treatment provider has inadequate capacity would not be cumulatively considerable; therefore, the impact would be less than significant.

No municipal separate storm sewer systems are located in the Proposed Project Area, so the Proposed Project would not contribute to a cumulative impact to relocating a storm water drainage facility. If groundwater is encountered during Proposed Project construction, the water would then be either discharged on site to an upland location, if permitted, or stored in Baker tanks or similar water retention equipment within staging yards prior to disposal off site. The Proposed Project may increase storm water runoff in some areas due to the introduction of new impervious services; however, this increase in runoff would be minimal because new impervious surfaces would be limited to the permanent disturbance at each pole (i.e., typically 11 square feet). Storm water would be conveyed primarily through existing natural drainage patterns. Proposed Project storm water runoff would be managed according to a SWPPP, and it is anticipated that the Current and Future Projects requiring more than 1 acre of ground disturbance would follow similar BMPs described in SWPPPs. The Current and Future Projects would be located more than 0.6 mile from the proposed 230 kV transmission line poles and thus are unlikely to have storm water flows combine with the Proposed Project due to the distance and variations in topography. The majority of the Current and Future Projects listed in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located in previously paved or developed areas. The current and future residential and commercial developments may require new or expanded storm water drainage facilities. Such facilities would likely be drainage features constructed on the sites of the properties such as sloped drainage systems, gutters, and surface drainage systems. The Proposed Project would not relocate, expand, or install new storm water drainage facilities. Construction of the Proposed Project would result in an incremental contribution to relocating, requiring new, or expanding storm water drainage facilities. The cumulative impact to relocated, new, or expanded storm water drainage facilities would not be cumulatively considerable; therefore, the impact would be less than significant.

Electric power use during construction of the Proposed Project and Current and Future Projects would not represent a substantial increase in existing usage and would be temporary. To provide temporary construction power and a backup power source, portable gas/diesel generators would be used for the Proposed Project. If a nearby existing overhead distribution system is available, it may be tapped to provide power during Proposed Project construction. Further, the Proposed Project and Current and Future Projects have been accounted for in grid forecasts and planning by the California Independent System Operator. Prior to Proposed Project ground disturbance, SDG&E would contact Underground Service Alert and notify utility companies to locate existing underground structures, including natural gas lines. Proposed Project construction methods would be adjusted as necessary to not compromise the integrity of existing lines. The Current

and Future Projects would be anticipated to contact Underground Service Alert prior to ground disturbance and avoid existing natural gas lines as feasible. Construction of the Proposed Project would result in an incremental contribution to relocating, requiring new, or expanding electrical or natural gas utilities. The cumulative impact to relocated, new, or expanded electrical or natural gas utilities would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project would install telecommunication infrastructure as part of the optical ground wire cables and fiber optic segments along the proposed 230 kV UG segment. The Proposed Project would not relocate or expand existing telecommunication infrastructure. Current and Future Projects, such as residential or commercial developments, may also install new telecommunications infrastructure, but new telecommunication infrastructure is not anticipated for the majority of the Current and Future Projects. Common telecommunications infrastructure for residential and commercial development includes fiber optic cables that are often installed underground and for relatively short distances as the Current and Future Projects residential and commercial developments would be constructed in urban areas. Construction of the Proposed Project would result in an incremental contribution to relocating, requiring new, or expanding telecommunication facilities. The cumulative impact to relocated, new, or expanded telecommunication facilities would not be cumulatively considerable; therefore, the impact would be less than significant.

The Sycamore Landfill has a remaining total capacity of 99,477,838 cubic yards, and the Proposed Project's construction debris volumes are estimated to occupy less than 0.01 percent of the total capacity. Even if the Proposed Project was to generate construction debris at the same time as ten other Current and Future Projects that generated the same quantity of debris as the Proposed Project, combined the Proposed Project and Current and Future Projects would only occupy a fraction of the land fill's total capacity. Construction of the Proposed Project would result in an incremental contribution to creating solid waste. The cumulative impact to solid waste in excess of landfill capacity would not be cumulatively considerable; therefore, the impact would be less than significant.

Some routine maintenance, such as replacing or upgrading parts, would generate waste, but waste generated during Proposed Project O&M would be minimal and infrequent. Of the Current and Future Projects, residential and commercial projects would be most likely to consistently generate municipal solid waste. Only a few commercial projects have been identified in Figure 4-1: Current and Future Projects within 3 Miles of the Proposed Project, so waste from commercial developments is not anticipated to be significant. An average U.S. household generates approximately 4.9 pounds per person per day (EPA 2025). Using the conversion factor published by the Environmental Protection Agency (EPA) of 1 cubic yard of mixed municipal solid waste (multifamily, uncompacted) equaling approximately 95 pounds, an average U.S. household would generate less than 0.1 cubic yards of municipal solid waste per person per day or less than 37 cubic yards per person annually (EPA 2016). Even if the Current and Future Projects added 10,000 new residents, which is not anticipated based on the sizes of the identified Current and Future Projects, the annual waste generated would only constitute a fraction of the Sycamore Landfill's remaining capacity of 99,477,838 cubic yards. Operations and maintenance of the Proposed Project would result in an incremental contribution to creating solid waste. The

cumulative impact to solid waste in excess of landfill capacity would not be cumulatively considerable; therefore, the impact would be less than significant.

4.3.20 Wildfire

A cumulatively considerable impact to wildfires would result if the Proposed Project's effects combined with the effects of one or more Current and Future Projects to impact emergency response or evacuation plans, exposure of project occupants to wildfire or wildfire-caused pollutants, exacerbation of fire risk, or post-fire risks. At the project level, O&M of the Proposed Project would not impair or interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, a cumulative impact from O&M to emergency response plans or emergency evacuation plans is not analyzed.

Cumulative impacts to an adopted emergency response plan or emergency evacuation plan are evaluated in Section 4.3.9 Hazards and Hazardous Materials. Construction of the Proposed Project and Current and Future Projects would result in a less-than-significant cumulative impact to the implementation or physical interference with an emergency response or evacuation plan.

The Proposed Project would be located within a State Responsibility Area (SRA) and moderate, high, and very high Fire Hazard Severity Zones (FHSZs). Proposed Project workers or nearby residents could be exposed to a wildland fire during construction. Risks to occupants in nearby homes or construction personnel would most likely come from the inability to avoid or escape a wildland fire. SDG&E would implement its Fire Prevention Plan for the Proposed Project, which includes training; drills; procedures for fire response, reporting, and prevention; necessary fire prevention equipment; coordination with local and federal fire officials; and identification of daily site-specific risk conditions. Construction of the Current and Future Projects located in the City of El Cajon would not be located within an SRA. Impacts from the Current and Future Projects within the City of El Cajon near SRA lands would be unlikely to combine with any wildfire impacts from the Proposed Project due to the paved and urban environment in the City of El Cajon, which would pose a low chance of ignition and/or barriers to the spread of fire. Impacts from the Current and Future Projects located outside of urban areas (e.g., the County infrastructure maintenance projects, a park, and a trail) would have a greater chance of combining with wildfire impacts from the Proposed Project during construction. However, the chance of fires igniting from the Current and Future Projects and the Proposed Project simultaneously would be low. Construction of the Proposed Project would result in an incremental contribution to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The cumulative impact to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would not be cumulatively considerable; therefore, the impact would be less than significant.

During Proposed Project O&M, SDG&E's vegetation management programs would clear vegetation adjacent to transmission lines within CPUC HFTDs and within a 10-foot radius of poles within areas under CAL FIRE's jurisdiction. A majority of the Proposed Project O&M activities would be conducted along paved, existing roads where the risk of igniting vegetation is generally low. Impacts from the Current and Future Projects within the City of El Cajon near SRA lands would be unlikely to combine with any wildfire impacts from the Proposed Project due to the paved and urban environment in the City of El Cajon, which would pose a low chance of ignition and/or barriers to the spread of fire. The Current and Future Projects that would be

located outside of urban areas and in an SRA (e.g., the County infrastructure maintenance projects, a park, and a trail) would not inherently pose a substantial wildfire risk once completed and during their operation. Operations and maintenance of the Proposed Project would result in an incremental contribution to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The cumulative impact to exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would not be cumulatively considerable; therefore, the impact would be less than significant.

The Proposed Project would introduce new transmission infrastructure to the Proposed Project Area. The following Current and Future Projects listed in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project are located within a Very High FHSZ:

- Gallow Pump Station Third Pump,
- Arnold Way Sidewalk,
- Flinn Springs Road Pathway,
- Old Highway 80 Road Improvements from Marina Springs Lane to Dunbar Lane,
- Rios Canyon Road Bridge at Los Coches Creek,
- SHOPP ID 20304,
- SHOPP ID 23406,
- 380 Vista Abierta Storm Drain,
- Alpine Boulevard and Tavern Storm Drain,
- Alpine County Park,
- Fiscal Year 24/25 Flood Control District Culvert Repair and Replacement,
- Lake Jennings Marketplace Commercial Development,
- Loveland Recreation Program Repairs Plan,
- North Glen Oaks Drive Bridge,
- Stairway and Valve Replacement at Loveland Dam,
- Sycuan-Sloane Canyon Trail, and
- Tavern Road Pathway.

During construction, impacts from the Current and Future Projects located outside of urban areas (e.g., the County infrastructure maintenance projects, a park, and a trail) would have a greater chance of combining with wildfire impacts from the Proposed Project during construction. However, the chance of fires igniting from the Proposed Project and Current and Future Projects simultaneously would be low. Construction of the Proposed Project would result in an incremental contribution to exacerbating fire risk from the installation of infrastructure. The cumulative impact to exacerbating fire risk from the installation of infrastructure would not be cumulatively considerable; therefore, the impact would be less than significant.

O&M of the Proposed Project would not require the installation of new, expanded, or relocated electrical power or natural gas facilities, nor would it require new, expanded, or relocated telecommunications facilities. Any maintenance of the Proposed Project would be conducted in accordance with APM FIRE-01 and APM FIRE-02, which would implement operational practices for reducing the risk of ignition, including procedures for system management, quality assurance and control, enhanced vegetation management, coordination with infrastructure providers, and workforce training. Impacts from the Current and Future Projects within the City

of El Cajon near SRA lands would be unlikely to combine with any wildfire impacts from the Proposed Project due to the paved and urban environment in the City of El Cajon, which would pose a low chance of ignition and/or barriers to the spread of fire. Impacts from the Current and Future Projects located outside of urban areas (e.g., the County infrastructure maintenance projects, a park, and a trail) would have a greater chance of combining with wildfire impacts from the Proposed Project during O&M. However, the chance of fires igniting from the Proposed Project and Current and Future Projects simultaneously would be low. O&M of the Proposed Project would result in an incremental contribution to exacerbating fire risk from the maintenance of infrastructure. The cumulative impact to exacerbating fire risk from the maintenance of infrastructure would not be cumulatively considerable; therefore, the impact would be less than significant.

SDG&E would adhere to measures identified in the Proposed Project SWPPP, including short- and long-term erosion and sediment control practices, which would reduce the potential for post-fire soil movement. Temporary Proposed Project disturbances would be relatively small and would not be expected to cause post-fire catastrophic land failures. Further, the Current and Future Projects listed in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located more than 0.6 mile from the proposed 230 kV transmission line poles and thus are unlikely to have runoff flows combine due to the distance and variations in topography. Construction of the Proposed Project would result in an incremental contribution to the exposure of people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. The cumulative impact to the exposure of people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes would not be cumulatively considerable; therefore, the impact would be less than significant.

Once constructed, the Proposed Project poles would introduce minimal areas of impervious surfaces as the typical maximum foundation diameter would be 11 feet. O&M of the Proposed Project would be conducted in accordance with SDG&E's existing O&M standards throughout the Proposed Project Area and would not involve substantial ground disturbance. As a result, O&M of the Proposed Project would be unlikely to create flooding or drainage changes. Further, the Current and Future Projects listed in Table 4-2: Current and Future Projects within 3 Miles of the Proposed Project would be located more than 0.6 mile from the proposed 230 kV transmission line poles and thus are unlikely to have runoff flows combine due to the distance and variations in topography. O&M of the Proposed Project would result in an incremental contribution to the exposure of people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. The cumulative impact to the exposure of people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes would not be cumulatively considerable; therefore, the impact would be less than significant.

4.4 REFERENCES

APLIC. 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC and Sacramento, CA. Online. https://www.nrc.gov/docs/ML1224/ML12243A391.pdf. Site visited May 2025.

APLIC. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, DC. Online. https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Site visited May 2025.

Caltrans. 2025. SHOPP Ten-Year Project Book. Online. https://projectbook.dot.ca.gov/. Site visited May 4, 2025.

California Department of General Services. 2025. CALGreen. Online. https://www.dgs.ca.gov/BSC/CALGreen. Site visited December 4, 2025.

CEC. 2025a. Electricity Consumption. Online. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/california-energy-consumption-dashboards-0. Site visited December 4, 2025.

CEC. 2025b. 2010-2024 CEC-A15 Results and Analysis. Online. https://www.energy.ca.gov/media/3874. Site visited December 4, 2025.

CEC. 2025c. 2025 Building Energy Efficiency Standards. Online. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency. Site visited December 4, 2025.

City of El Cajon. 2025. Map of Development Projects. Online. https://cityofelcajon.maps.arcgis.com/apps/MapTour/index.html?appid=38313716efc54ca2a6b1f00b356a3f3d. Site visited September 2025.

City of San Diego. 2009. San Diego Formation Basin. Online. https://www.sandiego.gov/sites/default/files/legacy/water/pdf/supply/sdbasin.pdf. Site visited December 2025.

County of San Diego Department of Public Works. 2022. 2023-2028 Capital Improvement Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/dpw/ENGINEERING_SERVICES/web-update/DPW%20CIP%20Workbook%202023-24.pdf. Site visited May 2, 2025.

County of San Diego Department of Public Works. 2024. 2026-2030 Capital Improvement Plan. Online. https://ehq-production-us-california.s3.us-west-1.amazonaws.com/982f8b630cd3316a2e0347940456bab1f719116e/original/1721925609/21e4aefd5885079b8808b0c1b234b3f1_DPW_CIP_FY_2025-26_-_2029-30_Funded_Projects.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKIJHZMYNPA%2F20250502%2Fus-west-1%2Fs3%2Faws4_request&X-Amz-Date=20250502T192920Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=52f95e16e772deea9117518bbcb0a944d3f406d1db997cfb1628e149a2ae4455. Site visited May 2, 2025.

County of San Diego Department of Public Works. 2025. Capital Improvement Plan. Online. https://gis-

portal.sandiegocounty.gov/arcgis/apps/MapSeries/index.html?appid=57b429f8a52148789e376110fcb0cb14. Site visited May 2, 2025.

County of San Diego. 2007. Guidelines for Determining Significance for Air Quality. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf. Site visited May 2025.

County of San Diego. 2025. Current Projects. Online. https://www.sandiegocounty.gov/content/sdc/pds/Current_Projects.html. Site visited May 6, 2025.

County of San Diego Planning and Development Services. 2015. 2015 GHG Guidance Recommended Approach to Addressing Climate Change in CEQA Documents. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Sweetwater-Place/PDS2014-TM-5588-Greenhouse-Gas-Guidance-2015.pdf. Site visited December 10, 2025.

County Parks. 2020. Mitigated Negative Declaration Sycuan-Sloane Canyon Trail. Online. https://files.ceqanet.opr.ca.gov/261447-5/attachment/UrweXdI7qVAMtJPkk-U38Vx9X-UJslE4Oh0pndQCTzD4fL3f0lk5zvNbTt_OIzG1CGs6_a-HaZ9q5iK00. Site visited May 2, 2025.

County Parks. 2022. August 2022 Sycuan-Sloane Canyon Trail FAQ. Online. https://www.sdparks.org/content/dam/sdparks/en/pdf/Development/Aug%202022%20FAQ%20with%20Responses%20FINAL.pdf. Site visited May 2, 2025.

County Parks. 2025. Alpine Community Park. Online. https://www.sdparks.org/content/sdparks/en/park-pages/AlpineCountyPark.html. Site visited May 2, 2025.

CPUC. 2025. Current Projects. Online. https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/permitting-and-environmental-review/current-projects. Site visited May 6, 2025.

EPA. 2016. Volume-to-Weight Conversion Factors U.S. Environmental Protection Agency Office of Resource Conservation and Recovery. Online. https://www.epa.gov/sites/default/files/2016-04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf. Site visited December 4, 2025.

EPA. 2025. National Overview: Facts and Figures on Materials, Wastes and Recycling. Online. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials. Site visited December 4, 2025.

Kim, Kyehee. Sweetwater Authority. Engineering Manager. Personal Communication with G. Sandel, Insignia. May 8, 2025. kkim@sweetwater.org

McCullough, Carl. County of San Diego Park and Recreation. Region Manager, I-8 Corridor. Personal Communication with G. Sandel, Insignia. May 8, 2025. Carl.McCullough@sdcounty.ca.gov.

Nagata, Yoshihito. County of San Diego Parks and Recreation. Park Project Manager, Development Division. Personal Communication with G. Sandel, Insignia. May 7, 2025. Yoshihito.Nagata@sdcounty.ca.gov.

San Diego County Water Authority. 2024. Water-Use Efficiency. Online. https://www.sdcwa.org/wp-content/uploads/2020/11/wateruseefficiency-fs.pdf. Site visited December 10, 2025.

State of California. 2025a. Renzulli Estates. Online. https://ceqanet.opr.ca.gov/2022040125. Site visited May 6, 2025.

State of California. 2025b. California Department of Water Resources. Online. https://water.ca.gov/. Site visited May 6, 2025.

State of California. 2025c. CEQAnet. Online. https://ceqanet.opr.ca.gov/. Site visited May 6, 2025.

Sweetwater Authority. 2025. CIP Dashboard. Online. https://experience.arcgis.com/experience/faee6e32cb2f4a25bdad0f86dcd1c60d/. Site visited May 4, 2025.

USFS. 2025. Cleveland National Forest Projects. Online. https://www.fs.usda.gov/r05/cleveland/projects. Site visited May 4, 2025.

CHAPTER 5 – OTHER CEQA CONSIDERATIONS

San Diego Gas & Electric Company's (SDG&E's) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) would involve the construction and operation and maintenance (O&M) of a double-circuit 230 kV transmission line segment, as well as modifications to one existing SDG&E substation—the Suncrest Substation. The Proposed Project would address California Independent System Operator- (CAISO-) identified reliability constraints on SDG&E's existing transmission lines and existing transformers.

5.1 ENERGY

According to California Public Resources Code (PRC) Section 21100(b)(3), any potential energy impacts from a project must be addressed in an Environmental Impact Report (EIR). Guidance to assess energy impacts is provided in Appendix F of the California Environmental Quality Act (CEQA) Guidelines.

According to the CEQA Guidelines, the potentially significant energy implications of a project will be considered in an EIR to the extent they are relevant and applicable to the project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

5.1.1 Energy Impacts of the Project

As discussed in Section 3.7 Energy, construction activities associated with the Proposed Project would require the short-term consumption of fossil fuel resources (e.g., diesel fuel and gasoline) to power construction equipment, motor vehicles, and helicopters used to build temporary access roads and work areas, as well as to install the overhead and underground transmission lines. However, construction would utilize electrical energy from the existing distribution system or a generator to temporarily power construction trailers, lighting, and other equipment. This temporary power would be representative of SDG&E's current energy supply portfolio. Portable gas/diesel generators would be used if distribution power is not available and as a backup power source. Modifications to the existing Suncrest Substation would be conducted within the existing substation fence line, with construction equipment powered by diesel and electricity provided by generators and/or existing substation power as needed. In addition, construction would be short term and temporary. The use of fuel would be necessary, efficient, and conservative in nature. As a result, construction of the Proposed Project would avoid the inefficient, wasteful, and unnecessary consumption of energy.

Maintenance activities would require limited use of fossil fuels (e.g., diesel and gasoline) for motor vehicle trips and occasional use of off-road equipment. The existing Suncrest Substation would remain unstaffed and would be monitored remotely. Typical O&M activities of the existing Suncrest Substation would involve routine inspections and preventive maintenance, as well as emergency work to maintain or restore service. O&M of the Suncrest Substation would cause no change in fuel use as inspections on the existing substation are ongoing.

O&M work (e.g., high-voltage capital repair or replacement) would be variable, unplanned, and require minimal fuel to power equipment. Additionally, annual comprehensive checks and maintenance would be performed by SDG&E maintenance personnel or qualified contractors

and would be incorporated into pre-existing maintenance programs. As a result, maintenance activities and O&M of the Proposed Project would avoid the inefficient, wasteful, and unnecessary consumption of energy.

5.2 GROWTH INDUCEMENT

According to California PRC Section 21100(b)(5), growth-inducing impacts of a project must be addressed in an EIR. Guidance to assess growth-inducing impacts is provided in Section 15126.2(d) of the CEQA Guidelines.

According to the CEQA Guidelines, a project can induce growth directly, indirectly, or by both methods. Growth inducement could occur through economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Although growth inducement is not an environmental effect itself, it may lead to physical changes that could result in environmental effects. Secondary environmental effects could also occur due to substantial growth inducement. Examples of secondary environmental effects could include increased demand for infrastructure capacity, increased demand for housing, increased traffic and noise, degradation or loss of plant or animal habitats, degradation of air or water quality, or conversion of land uses (Ascent 2024).

5.2.1 Growth-Inducing Impacts of the Project

As discussed in Section 3.15 Population and Housing, the Proposed Project would strengthen existing electrical infrastructure by helping to mitigate identified system reliability constraints (i.e., operational challenges and thermal overloads) on SDG&E's existing transmission lines (i.e., TL23054 and TL23055) and the Suncrest Substation, as well as supply the increase in forecasted load related to electrification in California. However, the Proposed Project would serve existing energy users within SDG&E's existing service territory, but would not expand that territory. SDG&E's service territory includes electrical and natural gas service in San Diego County and a portion of southern Orange County.

The population in San Diego County is expected to continue to increase into 2040 (California Department of Finance 2025, United States [U.S.] Census Bureau 2025). The Proposed Project does not propose any new housing, businesses, or other land use changes that would induce unplanned population growth or housing demand in or near the Proposed Project vicinity. Therefore, the construction and O&M of the Proposed Project would not include the development of new housing or increase the demand for new housing. As the Proposed Project would not induce unplanned population growth or housing demand, the Proposed Project would not further tax existing community service facilities, such as schools, hospitals, fire stations, and police stations. Moreover, the Proposed Project would not encourage or facilitate other activities that would cause population growth that could significantly affect the environment.

The Proposed Project construction workforce would consist of current SDG&E employees and/or SDG&E subcontractors who are local to the Proposed Project area. No permanent relocation of workers is anticipated for the Proposed Project.

The Proposed Project O&M workforce would consist of current SDG&E employees who are local to the Proposed Project area. As a result, the Proposed Project would not directly or

indirectly induce substantial unplanned population growth or housing demand beyond what is forecasted.

Although SDG&E's current electrical infrastructure provides energy service to users within the SDG&E service territory, on its own, the Proposed Project would not remove obstacles to population growth within the SDG&E service territory. While the Proposed Project would address CAISO-identified reliability constraints on SDG&E's existing transmission lines and existing transformers, the Proposed Project does not propose any new housing, businesses, or other land use changes that would induce unplanned population growth or housing demand in or near the Proposed Project vicinity.

5.3 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

According to Section 15126.2(c) of the CEQA Guidelines, an EIR must describe significant impacts, including impacts that cannot be reduced to a level of insignificance, even with mitigation. The potential environmental impacts of the Proposed Project and prescribed mitigation measures (MMs) to reduce these impacts are detailed in Chapter 3 – Environmental Impacts and Mitigation Measures. Chapter 4 – Cumulative Impacts discusses the cumulative effects of the Proposed Project in conjunction with past projects, other current projects, and reasonably foreseeable probable future projects.

As described in Section 3.5 Biological Resources, the Proposed Project may have adverse effects on candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or designated as such by the California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service (USFWS). Specifically, potentially significant impacts were identified for special-status plants, special-status wildlife species, and USFWS-designated critical habitat. To reduce these impacts to a less-than-significant level, species-specific MMs would be implemented, including MMs BIO-01 through BIO-13.

In addition to impacts to special-status species, the Proposed Project may have potentially significant impacts to riparian habitat and sensitive natural communities. Permanent impacts to upland native vegetation communities that support special-status species would be compensated at a one-to-one or two-to-one ratio, in accordance with MM BIO-13. While not anticipated, if impacts to jurisdictional waters or wetlands occur as part of the final design, SDG&E would provide compensatory mitigation that may include the creation, re-establishment, or enhancement of wetlands or waters; the purchase of credits at an approved mitigation bank; or contribution to an approved in-lieu fee program, in accordance with MM BIO-14.

The Proposed Project would also have the potential to conflict with the following plans, which would result in potentially significant impacts:

- San Diego County Water Authority's Subregional Natural Community Conservation Plan/ Habitat Conservation Plan (HCP),
- County of San Diego (County) Subarea Plans,
- SDG&E's HCP Amendment,
- SDG&E's Low-Effect HCP for Quino Checkerspot Butterfly, and

- Southern California National Forests Land Management Plan – Part 2 Cleveland National Forest Strategy.

To address conflicts with these plans, various species-specific MMs would be implemented, in accordance with MM BIO-02 through BIO-07 and MM BIO-9 through BIO-13. In addition, SDG&E would coordinate with Preserve or Proposed Preserve Managers, in accordance with MM BIO-15.

As discussed in Section 3.14 Noise, potentially significant noise impacts would result from construction noise levels for residents within 160 feet of Vista De Montemar, La Cresta Road, Mountain View Road, Al Bahr Road, and/or Canyon Rim Drive. Additionally, although construction activities are planned to occur between 7:00 a.m. and 7:00 p.m., night work may be required in limited circumstances, such as clearance restrictions, planned outages, and other factors that are beyond the control of the construction contractor. To reduce these impacts to a less-than-significant level, SDG&E would prepare and submit to the California Public Utilities Commission (CPUC) a Noise Control Plan, which would detail the frequency, location, and methodology for noise monitoring prior to and during the proposed construction activities. The Noise Control Plan would also detail the actions and procedures that the applicant would implement to avoid significant impacts from temporary ambient noise increases, in accordance with MM NOI-01.

As discussed in Section 3.18 Transportation, the Proposed Project would result in potentially significant impacts to transportation due to temporary lane closures for construction on La Cresta Road and Mountain View Road, which are both designated as potential evacuation routes in the San Diego County General Plan. To reduce impacts to a less-than-significant level, a Traffic Control Plan would be prepared for approval by the County prior to any temporary construction activities requiring heavy vehicle and equipment traffic on public roadways or full or partial closure of public streets, in accordance with MM TRA-01.

While the Proposed Project would result in potentially significant impacts to biological resources, noise, and transportation, these environmental impacts would be reduced to a less-than significant level with the implementation of the proposed MMs. Therefore, the Proposed Project would not result in any significant and unavoidable adverse impacts.

5.4 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

According to Section 15126.2(c) of the CEQA Guidelines, an EIR must discuss the significant irreversible environmental changes that would be caused by a project. As discussed in Section 5.2.1 Growth-Inducing Impacts of the Project, the Proposed Project would involve the construction and O&M of a double-circuit 230 kV transmission line segment, as well as modifications to the existing Suncrest Substation, to address reliability constraints on SDG&E's existing transmission lines and existing transformers. The construction and O&M of the Proposed Project present a long-term commitment by SDG&E to deliver a reliable supply of electricity to end users in San Diego County. Therefore, as O&M activities would occur indefinitely, the physical footprint of the double-circuit 230 kV transmission line segment would be permanently and irreversibly removed from other potential uses.

As discussed in Section 5.1.1 Energy Impacts of the Project and Section 3.7 Energy, construction activities associated with the Proposed Project would require the short-term consumption of fossil fuel resources (e.g., diesel fuel and gasoline) to power construction equipment, motor vehicles, and helicopters used to build temporary access roads and work areas, as well as to install the overhead and underground transmission lines. Construction would utilize electrical energy from the existing distribution system or a generator to temporarily power construction trailers, lighting, and other equipment.

Short-term fuel consumption from equipment, motor vehicle, and helicopter use during construction would be required to construct the Proposed Project. Construction of the Proposed Project is estimated to consume a total of approximately 233,363 gallons of gasoline, 941,533 gallons of diesel fuel, and 30,558 gallons of jet fuel.

When available, an existing overhead distribution line near the Proposed Project would be tapped for construction power at the staging yards. Portable gas/diesel generators would be used if distribution power is not available and as a backup power source.

Modifications to the existing Suncrest Substation would be conducted within the existing substation fence line, with construction equipment powered by diesel and electricity provided by generators and/or existing substation power as needed. Because Proposed Project construction activities would represent less than 0.002 percent of the total 13.6 billion gallons of gasoline use, 0.019 percent of the total 4.9 billion gallons of diesel use, and 0.001 percent of the total 3.5 billion gallons of jet fuel use in the state of California, the Proposed Project would not result in significant irreversible environmental changes and would not cause the irretrievable commitment of resources.

As discussed in Section 3.5 Biological Resources, construction and O&M of the Proposed Project could result in the loss of special-status wildlife species or sensitive habitat due to the physical footprint of the of the double-circuit 230 kV transmission line segment. SDG&E would implement applicant-proposed measure (APM) BIO-01 through BIO-18, best management practices (BMPs), and MM BIO-01 through BIO-15 to reduce impacts to these sensitive biological resources to a less-than-significant level. Through compliance with applicable regulations and the implementation of the APMs and MMs described in the EIR, the Proposed Project is not anticipated to result in potentially significant impacts.

Although not anticipated to occur, Proposed Project-related incidents would be unlikely to result in irreversible damages to the environment. As discussed in Section 3.10 Hazards and Hazardous Materials, the transport, use, and disposal of hazardous materials could potentially result in an inadvertent spill or leak during construction of the Proposed Project. However, only small amounts of hazardous materials would be used during the approximately 5 years of construction. SDG&E would implement its standard BMPs and maintain spill kits on site to minimize the potential for spills and respond to potential releases of hazardous materials. In addition, implementation of SDG&E's standard Worker Environmental Awareness Program would provide construction personnel with training regarding the application of BMPs and compliance with federal and state regulations. Construction of the Proposed Project would be subject to the laws and regulations governing the handling and disposal of hazardous materials, and SDG&E would adhere to all relevant local, state, and federal regulations during the handling and disposal

of hazardous materials. Therefore, impacts resulting from a potential spill of hazardous materials would be less than significant.

Furthermore, O&M activities would be conducted in the same manner as they were prior to construction of the Proposed Project. Based on the existing infrastructure in the Proposed Project area, post-construction O&M requirements are not anticipated to significantly increase or result in an increased use of hazardous materials. Vehicles and equipment that would be used to maintain Proposed Project facilities may contain materials that could constitute a hazardous substance if released into the environment; however, the use of such chemicals would typically be considerably less than those used during Proposed Project construction activities. To reduce the potential for adverse effects to occur, SDG&E would maintain spill kits in maintenance vehicles and continue to implement its Hazardous Materials Management Plan, as required by law, to prevent or address any accidental release of hazardous materials. Because O&M activities would be conducted in the same matter as they were prior to construction, no new impacts would result from reasonably foreseeable upset or accident conditions during O&M of the Proposed Project. Therefore, O&M impacts would be less than significant.

5.5 REFERENCES

Ascent. 2024. Draft Environmental Impact Report Northern San Joaquin 230 kV Transmission Project.

Association of Environmental Professionals. 2025. California Environmental Quality Act Statute & Guidelines.

California Department of Finance. 2025. Population Growth Projections by County. Online. https://dof.ca.gov/forecasting/demographics/projections/. Site visited April 2025.

CPUC. 2019. Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-filing and Proponent's Environmental Assessments. Online. https://www.cpuc.ca.gov/-/media/cpuc-website/files/legacyfiles/c/6442463239-ceqa-pre-filing-guidelines-pea-checklist-nov-2019.pdf. Site visited June 2025.

PRC. 2025. Online. https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=PRC&tocTitle=+Public+Resources+Code+-+PRC. Site visited June 2025.

U.S. Census Bureau. 2025. Occupancy Status for San Diego County. Online. https://data.census.gov/table/ACSDT5Y2020.B25002?q=Vacancy+Rates&g=050XX00US06073. Site visited November 2025.

CHAPTER 6 – ALTERNATIVES

6.1 INTRODUCTION

This chapter identifies alternatives to the San Diego Gas & Electric Company (SDG&E) Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project). Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines states that:

> "an EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

CEQA Guidelines Section 15364 defines feasible as, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." Generally, alternatives that are feasible, meet most or all of the Proposed Project objectives, and lessen or avoid significant environmental effects are carried forward for detailed analysis. Additionally, CEQA Guidelines Section 15126.6 requires evaluation of the No Project Alternative. For this EIR, the No Project Alternative was identified as the circumstance under which the Proposed Project is not approved and does not proceed. The No Project Alternative helps decision makers compare the impacts from the Proposed Project to the impacts from not approving the Proposed Project. If the No Project Alternative is the environmentally superior alternative, then another alternative must be identified as the environmentally superior alternative.

This chapter details the process for eliminating alternatives, explains the selection of alternatives for detailed analysis, compares the environmental impacts of the alternatives carried forward for detailed analysis to the environmental impacts of the Proposed Project, and describes the environmentally superior alternative.

6.2 CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

In accordance with California Public Utilities Commission (CPUC) General Order (GO) 131-E Section VII Part C.2.c, where the Proposed Project has been evaluated and approved by the California Independent System Operator (CAISO) in a transmission plan, "The range of reasonable alternatives to the proposed project in an initial draft EIR circulated for public comment may be limited to alternative routes or locations for construction of the relevant CAISO transmission plan approved electric project and the 'no action' alternative." As a result, the alternatives discussed in this chapter are limited to route alternatives and the No Project Alternative since the Proposed Project was approved by CAISO in its 2022-2023 Transmission Plan. The segments of the Proposed Project that would be installed underground versus overhead, or vice versa, in the same location can be considered route alternatives.

Generally, any feasible route alternative determined to meet most or all of the Proposed Project objectives described in Section 6.2.1 Attainment of Project Objectives and avoid or substantially lessen the significance of an impact of the Proposed Project would be carried forward for more detailed review. With the implementation of mitigation measures (MMs) and applicant-proposed

measures (APMs), the Proposed Project would not cause any significant or unavoidable environmental impacts. Thus, route alternatives that could avoid or lessen impacts were neither identified nor carried forward for detailed analysis on that basis. The route alternatives that were carried forward for detailed environmental analysis included those able to meet most of the Proposed Project objectives. The No Project Alternative was analyzed in accordance with Section 1526.6 (e) of the CEQA Guidelines and CPUC GO 131-E Section VII Part C.2.c. According to GO 131-E Section VII Part C.2.c., the range of reasonable alternatives in an initial draft EIR circulated for public comment may be limited to alternative routes or locations for construction of the relevant CAISO transmission plan approved electric project and the "no action" alternative. As a result, this alternatives analysis is limited to route alternatives that would satisfy the Miguel-Sycamore Canyon 230 kV line Loop-in to Suncrest Project that is listed in Table 8.2-1 New Reliability Projects Found to be Needed in the ISO 2022-2023 Transmission Plan. The considerations for selection of route alternatives and the No Project Alternative for detailed environmental analysis are described in this section. Based on the CAISO process and the foregoing, systemic alternatives other than the No Project Alternative were not analyzed.

6.2.1 Attainment of Project Objectives

As identified by CAISO in its 2022-2023 Transmission Plan, the purpose of the Proposed Project is to address operational challenges and thermal overloads on SDG&E's existing transmission lines from the Suncrest Substation to the Sycamore Canyon Substation and existing transformers at the Suncrest Substation. To meet the Proposed Project purpose, the Proposed Project includes the following objectives:

- meet SDG&E's obligation to implement the CAISO-approved project;
- improve system reliability for SDG&E's approximately 3.7 million energy customers as well as the electrical grid as a whole;
- increase capacity to meet the forecasted load demands related to electrification;
- address operational challenges and thermal overloads on SDG&E's existing transmission lines (i.e., Transmission Line [TL] 23054 and TL23055);
- address operational challenges and thermal overloads on existing transformers at SDG&E's existing Suncrest Substation;
- achieve commercial operation by 2032 to timely address critical reliability issues within the transmission system;
- locate the Proposed Project on land adjacent to SDG&E's existing rights-of-way (ROWs) or existing utility uses or otherwise avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning to the extent practicable;
- construct, operate, and maintain the facility with safety as a top priority;

- maintain compliance with North American Electric Reliability Corporation standards; and

- avoid or mitigate significant adverse impacts to both the environment and community to achieve a project that is designed for the greatest public good and least private injury.

6.2.2 Feasibility

CEQA Guidelines Section 15364 defines feasible as, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." CEQA Guidelines Section 15126.6 identifies the following factors that may be taken into account when addressing the feasibility of alternatives: "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)."

CEQA Guidelines Section 15126.6 describes the "rule of reason" standard for the identification of a reasonable range of alternatives to be analyzed and considered. Subdivision (f) of that section identifies "other plan or regulatory limitations," as well as the ability for a project to be accomplished within "a reasonable period of time", consistent with Section 15364, as being relevant in the determination of feasibility. Because it was derived with existing statutory, regulator and policy framework relating to the implementation of California's ambitious energy goals, the CAISO 2022-2023 Transmission Plan and the CAISO-specified project in service date were integral into the overall transmission planning process. Therefore, these factors are key considerations in informing the feasibility of an alternative route.

The Proposed Project was identified in the CAISO 2022-2023 Transmission Plan as a reliability-driven project, and reliability-driven projects are "required to reliably supply the increase in forecasted load related to electrification…" (CAISO 2023). Other state agencies, such as the California Air Resources Board, the California Energy Commission and the CPUC have expressly adopted timelines supporting the broader energy goals of the state.

The expected in-service date set by CAISO in the 2022-2023 Transmission Plan for the Proposed Project is 2032. As such a primary component of the Proposed Project's success is its ability to address critical reliability issues in a timely manner, if a route alternative cannot meet the 2032 in-service date, the route alternative is not capable of being accomplished in a successful manner within a reasonable period of time, and is therefore infeasible.

Route alternatives considered infeasible were eliminated from detailed analysis, as described in Section 6.3 Alternatives Considered but Eliminated from Detailed Analysis.

6.2.3 Environmental Impacts of the Project

As detailed in Chapter 3 – Environmental Impacts and Mitigation Measures, the Proposed Project would have no impact, a less-than-significant impact, or a less-than-significant impact after mitigation to all environmental resources assessed. Mitigation was prescribed for the

following environmental resources areas to reduce one or more potentially significant effects of the Proposed Project to a less-than-significant level:

- Biological Resources,
- Cultural Resources,
- Noise, and
- Transportation.

The Proposed Project would not result in significant effects after mitigation. As a result, no alternative could avoid or substantially lessen any significant effects of the Proposed Project pursuant to Section 15126.6 (c) of the CEQA Guidelines. For impacts to specific environmental resource criteria, the route alternatives and No Project Alternative carried forward for detailed analysis could increase or decrease impacts compared to the Proposed Project. Section 6.4 Routing Alternatives and No Project Alternative Evaluated in Detail in this EIR describes whether an alternative would increase or decrease the impacts to environmental resource criteria compared to the Proposed Project and whether this would result in a change in the level of significance of the impact (e.g., a decrease from a less-than-significant impact determination to a no impact determination) compared to the Proposed Project.

6.3 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

As previously described, route alternatives were selected for detailed analysis based on the ability of the route alternative to meet Proposed Project objectives and the feasibility of the route alternative. With the implementation of MMs and APMs, the Proposed Project would not cause any significant or unavoidable environmental impacts and thus route alternatives were not carried forward for detailed analysis to avoid or minimize significant effects. Additionally, the No Project Alternative was analyzed in accordance with Section 1526.6 (e) of the CEQA Guidelines and CPUC GO 131-E Section VII Part C.2.c. The following Proposed Project route alternatives were considered by the CPUC but eliminated from further analysis due to their failure to meet one or more Proposed Project objectives and infeasibility.

6.3.1 Routing Alternatives

The following route alternatives were eliminated from further analysis because they were deemed infeasible and would likely not meet one or more key Proposed Project objectives. Preliminary analysis of these route alternatives is summarized in Attachment 6-A: Summary of Alternative Routes Preliminary Screening Analysis and described in more detail under the subheadings that follow. The dismissed routes are depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation.

6.3.1.1 Alternative Route 3B

6.3.1.1.1 Description

Alternative Route 3B was developed to achieve an entirely overhead route. Achieving an entirely overhead design between TL23021 and the existing Suncrest Substation while avoiding Bureau of Indian Affairs (BIA) land informed the path of Alternative Route 3B.

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route 3B would be constructed in an entirely overhead configuration. Alternative Route 3B would connect with SDG&E's existing TL23021 and continue east along La Cresta Road for approximately 0.2 mile. Alternative Route 3B would follow the western segment of the Proposed Project for approximately 2.6 miles before traveling southeast for approximately 0.5 mile across undeveloped land.[1] Alternative Route 3B would travel north along Harbison Canyon Road for approximately 0.4 mile and continue southeast across undeveloped land for approximately 0.9 mile. Alternative Route 3B would cross Calle de Nicole and follow Trafalgar Road southeast for approximately 0.4 mile before crossing Dehesa Road. Alternative Route 3B would follow Stallion Oaks Road southeast for approximately 0.7 mile, cross Stallion Oaks Road, and continue east across 0.3 mile of undeveloped land before crossing the existing SDG&E 69 kV transmission line north of Stallion Oaks Road. Alternative Route 3B would then parallel the existing SDG&E 69 kV transmission line for approximately 5.6 miles before crossing the existing SDG&E 69 kV transmission line approximately 0.1 mile east of Japatul Road. Alternative Route 3B would parallel the Proposed Project alignment from a location approximately 0.2 mile east of Japatul Road to the existing Suncrest Substation. Alternative Route 3B would cross lands owned or managed by Sweetwater Authority and the United States (U.S.) Forest Service (USFS).

6.3.1.1.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, Alternative Route 3B would require the development of additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as no interconnection point on the western terminus of Alternative Route 3B currently exists. Alternative Route 3B would require the installation of an approximately 200 to 300-foot transmission structure on undeveloped land adjacent to La Cresta Road to interconnect to SDG&E's existing TL23021. An additional multi-year delay to the Proposed Project schedule would likely occur due to the additional construction coordination required to design and construct the structure, given its large size and close proximity to a public road. This factor would prevent the Proposed Project from achieving commercial operability by 2032. Additionally, Alternative Route 3B would require the acquisition of wide ROWs to accommodate the entirely overhead route, and not all of these ROWs would be adjacent to existing SDG&E ROWs resulting in potential environmental impacts and the displacement of people caused by the acquisition of additional residences. Further, Alternative Route 3B would require the siting of poles within roads which would create safety concerns due to the creation of new operational conflicts caused by the narrow road widths. For these reasons, this alternative was dismissed from further evaluation.

Although the following potential impact was considered, Alternative Route 3B was ultimately dismissed from further evaluation because it was deemed infeasible:

- The alternative would introduce aesthetics impacts through installing additional steel, vertical infrastructure adjacent to La Cresta Road in order to interconnect to TL23021,

[1] Undeveloped land can be owned by public or private entities and lacks homes, utilities, roads, or other human-built infrastructure.

which is located high above the road due to the topography at this location. Because the pole would be very large relative to its height, the pole would encroach into either the road or the Crestridge Ecological Reserve.

6.3.1.2 Alternative Route A

6.3.1.2.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route A would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route A would cross land owned or managed by the BIA, Sweetwater Authority, and the USFS. Alternative Route A would primarily follow the Alternative Route 3B alignment described in Section 6.3.1.1 Alternative Route 3B. Alternative Route A would deviate from Alternative Route 3B and would travel south for approximately 1 mile within or adjacent to an existing utility easement along Harbison Canyon Road before turning east and traveling southeast within an existing utility easement along Dehesa Road for approximately 1.9 miles. Alternative Route A was developed to follow Dehesa Road between Harbison Canyon Road and Stallion Oaks Road to allow for opportunities for undergrounding, resulting in the deviation from Alternative Route 3B. Approximately 0.3 mile north of Hidden Glen Road, Alternative Route A would deviate from the Alternative Route 3B alignment by traveling approximately 0.7 mile across primarily undeveloped land before crossing an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road. At the east end of Alternative Route A, the route was designed to limit the number of new structures on USFS-administered land, resulting in a deviation from Alternative Route 3B. Alternative Route A would continue across approximately 3.8 miles of primarily undeveloped land before crossing the existing SDG&E

6.3.1.2.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would also cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, Alternative Route A would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as no interconnection point on the western terminus of Alternative Route A currently exists. Alternative Route A would require the installation of an approximately 200 to 300-foot transmission structure on undeveloped land adjacent to La Cresta Road to interconnect to SDG&E's existing TL23021 compared to the Proposed Project. An additional multi-year delay to the Proposed Project schedule would likely occur due to the additional construction coordination required to design and construct the structure, given its large size and close proximity to a public road. This factor could potentially prevent the Proposed Project from achieving commercial operability by 2032. Additionally, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route A is not capable of being accomplished in a successful manner

within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route A is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route A was ultimately dismissed from further evaluation because it was deemed infeasible:

- The alternative would introduce aesthetics impacts through installing additional steel, vertical infrastructure adjacent to La Cresta Road in order to interconnect to TL23021, which is located high above the road due to the topography at this location. Because the pole would be very large relative to its height, the pole would encroach into either the road or the Crestridge Ecological Reserve.

- Undergrounding the Alternative Route A segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures installed on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

6.3.1.3 Alternative Route B

6.3.1.3.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route B would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route B would cross land owned or managed by the BIA, Sweetwater Authority, and USFS. Alternative Route B would primarily follow the Alternative Route A alignment and would cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road and cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. Alternative Route B would deviate from the Alternative Route A alignment at the intersection of Harbison Canyon Road and Dehesa Road, continuing south along Dehesa Road on BIA land for approximately 0.2 mile and then turning east and crossing BIA land for approximately 1.4 miles. Alternative Route B was developed to follow the existing transmission line alignment across BIA land, which resulted in a deviation from Alternative Route A.

6.3.1.3.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, Alternative Route B would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as no interconnection point on the western terminus of Alternative Route B

currently exists. Alternative Route B would require the installation of an approximately 200 to 300-foot transmission structure on undeveloped land adjacent to La Cresta Road to interconnect to SDG&E's existing TL23021 compared to the Proposed Project. An additional multi-year delay to the Proposed Project schedule would likely occur due to the additional construction coordination required to design and construct the structure, given its large size and close proximity to a public road. This factor could potentially prevent the Proposed Project from achieving commercial operability by 2032. Additionally, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route B is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route B is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route B was ultimately dismissed from further evaluation because it was deemed infeasible:

- Construction of the alternative route would likely require closure or substantial disruptions to the Sycuan Casino Resort during construction activities conducted along Casino Way.

- The alternative would introduce aesthetics impacts through additional steel, vertical infrastructure adjacent to La Cresta Road in order to interconnect to TL23021, which is located high above the road due to the topography at this location. Because the pole would be very large relative to its height, the pole would encroach into either the road or the Crestridge Ecological Reserve.

- Undergrounding the Alternative Route B segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures installed on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

6.3.1.4 Alternative Route C

6.3.1.4.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route C would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route C would cross land owned or managed by Sweetwater Authority and the USFS. Alternative Route C would primarily follow the Alternative Route 3B alignment, described in Section 6.3.1.1 Alternative Route 3B. Alternative Route C would deviate from the Alternative Route 3B alignment and travel

approximately 0.7 mile across primarily undeveloped land before crossing an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road. At the east end of Alternative Route C, the route was designed to limit the number of new structures on USFS-administered land, resulting in a deviation from Alternative Route 3B. Alternative Route C would continue across approximately 3.8 miles of primarily undeveloped land before crossing the existing SDG&E 500 kV transmission line again and continuing to connect to the existing Suncrest Substation.

6.3.1.4.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, Alternative Route C would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as no interconnection point on the western terminus of Alternative Route C currently exists. Alternative Route C would require the installation of an approximately 200 to 300-foot transmission structure on undeveloped land adjacent to La Cresta Road to interconnect to SDG&E's existing TL23021 compared to the Proposed Project. An additional multi-year delay to the Proposed Project schedule would likely occur due to the additional construction coordination required to design and construct the structure, given its large size and close proximity to a public road. This factor could potentially prevent the Proposed Project from achieving commercial operability by 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route C is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route C is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route C was ultimately dismissed from further evaluation because it was deemed infeasible:

- The alternative would introduce aesthetics impacts through installing additional steel, vertical infrastructure adjacent to La Cresta Road in order to interconnect to TL23021, which is located high above the road due to the topography at this location. Because the pole would be very large relative to its height, the pole would encroach into either the road or the Crestridge Ecological Reserve.

- Undergrounding the Alternative Route C segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of these four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with the ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures installed on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

6.3.1.5 Alternative Route D

6.3.1.5.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route D would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route D would cross land owned or managed by the U.S. Fish and Wildlife Service (USFWS), Endangered Habitats Conservancy, BIA, Sweetwater Authority, and USFS. Alternative Route D would primarily follow the Alternative Route C alignment and would cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road and cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. The western segment of Alternative Route D deviates from the Alternative Route C alignment and would cross conserved lands and BIA lands for approximately 3 miles and travel north within or adjacent to an existing utility easement along Harbison Canyon Road for approximately 1 mile. Alternative Route D was developed to follow the existing utility corridor between the interconnection to TL23021 and Harbison Canyon Road, resulting in a deviation from Alternative Route C in the west portion of the route.

6.3.1.5.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route D is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route D is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route D was ultimately dismissed from further evaluation because it was deemed infeasible:

- Undergrounding the Alternative Route D segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures installed on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

- This route would cross the San Diego National Wildlife Refuge (which is managed by the USFWS) and Endangered Habitats Conservancy lands, which could result in land use conflicts and/or increased impacts to sensitive species and habitats.

6.3.1.6 Alternative Route E

6.3.1.6.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route E would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route E would cross land owned or managed by the BIA, Sweetwater Authority, and USFS. Alternative Route E would primarily follow the Alternative Route D alignment, cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road, and cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. The western segment of Alternative Route E would also cross BIA land, but Alternative Route E deviates from Alternative Route D and would follow an existing utility easement along Dehesa Road. Alternative Route E was developed to allow for undergrounding opportunities along Dehesa Road in the west portion of the route and to avoid USFWS lands, resulting in a deviation from Alternative Route D.

6.3.1.6.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Additionally, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route E is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route E is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route E was ultimately dismissed from further evaluation because it was deemed infeasible:

- Undergrounding the Alternative Route E segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures installed on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

6.3.1.7 Alternative Route F

6.3.1.7.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route F would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route F would cross land owned or managed by the USFWS, Endangered Habitats Conservancy, BIA, Sweetwater Authority, and USFS. Alternative Route F would primarily follow the Alternative Route D alignment, cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road, and cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. Alternative Route F would also cross BIA land but would deviate from Alternative Route D at the intersection of Harbison Canyon Road and Dehesa Road, where Alternative Route F would continue to travel within or adjacent to an existing utility easement along Dehesa Road for approximately 1.2 miles. Alternative Route F was developed to allow for undergrounding opportunities along Dehesa Road between Harbison Canyon Road and Stallion Oaks Road, resulting in a deviation from Alternative Route D.

6.3.1.7.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route F is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route F is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route F was ultimately dismissed from further evaluation because it was deemed infeasible:

- Undergrounding the Alternative Route F segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures installed on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

- This route would cross the San Diego National Wildlife Refuge (which is managed by the USFWS) and Endangered Habitats Conservancy lands, which could result in land use conflicts and/or increased impacts to sensitive species and habitats.

6.3.1.8 Alternative Route G

6.3.1.8.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route G would travel within existing utility easements and along existing roads, as well as across undeveloped land, to connect to the Suncrest Substation. Alternative Route G would cross land owned or managed by the BIA, Sweetwater Authority, and USFS. Alternative Route G would primarily follow the Alternative Route E alignment, crossing an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road, and crossing the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. Alternative Route G deviates from Alternative Route E at the intersection of Harbison Canyon Road and Dehesa Road, where Alternative Route G would continue to travel within or adjacent to an existing utility easement along Dehesa Road for approximately 1.2 miles. Alternative Route G was developed to allow for undergrounding opportunities along Dehesa Road, resulting in a deviation from Alternative Route E.

6.3.1.8.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route G is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route G is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route G was ultimately dismissed from further evaluation because it was deemed infeasible:

- Undergrounding the Alternative Route G segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of the underground duct banks, would introduce additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

6.3.1.9 Alternative Route H

6.3.1.9.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route H would travel within existing utility easements and along existing roads, as well as across undeveloped land to connect to the Suncrest Substation. Alternative Route H would cross land owned or managed by the BIA, USFWS, Endangered Habitats Conservancy, Sweetwater Authority, and USFS. Alternative Route H would primarily follow the Alternative Route D alignment, cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road, and cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. Alternative Route H deviates from the Alternative Route D alignment south of the intersection of Quail Haven Lane and Dehesa Road, where Alternative Route H would continue to travel within or adjacent to an existing utility easement east and along Casino Way, crossing BIA land for approximately 1.4 miles. Alternative Route H was developed to follow the existing transmission line alignment across and in the vicinity of BIA land, resulting in a deviation from Alternative Route D.

6.3.1.9.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route H is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route H is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route H was ultimately dismissed from further evaluation because it was deemed infeasible:

- Construction of the alternative route would likely require closure or substantial disruptions to the Sycuan Casino Resort during construction activities conducted along Casino Way.

- Undergrounding the Alternative Route H segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

- This route would cross the San Diego National Wildlife Refuge (which is managed by the USFWS) and Endangered Habitats Conservancy lands, which could result in land use conflicts and/or increased impacts to sensitive species and habitats.

6.3.1.10 Alternative Route I

6.3.1.10.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route I would travel within existing utility easements and along existing roads, as well as across undeveloped land to connect to the Suncrest Substation. Alternative Route I would cross land owned or managed by the BIA, Sweetwater Authority, and USFS. Alternative Route I would primarily follow the Alternative Route G alignment and would cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road and then cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. Alternative Route I deviates from the Alternative Route G alignment south of the intersection of Quail Haven Lane and Dehesa Road, where Alternative Route I would continue to travel within or adjacent to an existing utility easement east and along Casino Way, crossing BIA land for approximately 1.4 miles. Alternative Route I was developed to follow the existing transmission line alignment across BIA land, resulting in a deviation from Alternative Route G.

6.3.1.10.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route I is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route I is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route I was ultimately dismissed from further evaluation because it was deemed infeasible:

- Construction of the alternative route would likely require closure or substantial disruptions to the Sycuan Casino Resort during construction activities conducted along Casino Way.

- Undergrounding the Alternative Route I segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of

an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

6.3.1.11 Alternative Route J

6.3.1.11.1 Description

As depicted in Attachment 6-B: Alternatives Dismissed from Further Evaluation, Alternative Route J would travel within existing utility easements and along existing roads and undeveloped land to connect to the Suncrest Substation. Alternative Route J would cross land owned or managed by the BIA, USFWS, California Department of Fish and Wildlife (CDFW), Sweetwater Authority, and USFS. Alternative Route J would follow the eastern segment of the alignment for Alternative Routes A, B, C, D, E, F, G, H, and I; cross an existing SDG&E 500 kV transmission line south of Japatul Road and east of High Glen Road; and cross the existing SDG&E 500 kV transmission line again approximately 0.4 mile southwest of the Suncrest Substation. The western terminus of Alternative Route J deviates from the previously described routes, and Alternative Route J would continue east from an existing 230 kV transmission line connection point southeast of Vista Sierra Drive and cross approximately 2.1 miles of lands owned or managed by the USFWS and CDFW. Alternative Route J was developed to avoid an extended crossing of BIA land or routing along roads within BIA land, resulting in a deviation from Alternative Routes A, B, C, D, E, F, G, H, and I.

6.3.1.11.2 Discussion and Conclusion

This alternative would meet most of the Proposed Project objectives. The crossing of Sweetwater Authority and USFS lands is anticipated to be feasible. However, this alternative would cross land managed by the BIA. Crossing BIA-managed land would require the acquisition of easements and ROWs from the BIA, introducing schedule delays that could prevent the Proposed Project from achieving commercial operability by June 2032. Further, this alternative would cross an existing 500 kV transmission line, requiring the existing 500 kV transmission line to be raised. Associated structural limitations, clearance requirements, and cost implications could prevent commercial operability of the Proposed Project by June 2032. As described in Section 6.2.2 Feasibility, Alternative Route J is not capable of being accomplished in a successful manner within a reasonable period of time if it cannot meet the CAISO-specified in-service date of 2032. As a result, Alternative Route J is infeasible and was dismissed from further evaluation.

Although the following potential impacts were considered, Alternative Route J was ultimately dismissed from further evaluation because it was deemed infeasible:

- Undergrounding the Alternative Route J segment at the 500 kV transmission line crossing would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential

environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species).

- The riser structures on either side of the existing 500 kV transmission line would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land.

- This route would cross the San Diego National Wildlife Refuge (which is managed by the USFWS) and the Crestridge Ecological Reserve (which is managed by the CDFW), which could result in land use conflicts and/or increased impacts to sensitive species and habitats.

6.4 ROUTING ALTERNATIVES AND NO PROJECT ALTERNATIVE EVALUATED IN DETAIL IN THIS EIR

The following route alternatives and No Project Alternative are described and evaluated for environmental impacts in this section using the CEQA Environmental Checklist:

- No Project Alternative,
- Alternative Route 4,
- Alternative Route 4B, and
- Alternative Route 5.

The evaluated route alternatives are depicted in Attachment 6-C: Project Route Alternatives.

6.4.1 No Project Alternative

6.4.1.1 Description

The No Project Alternative assumes that no new 230 kV transmission loop in line would be constructed and no modifications to the existing Suncrest Substation would take place.

6.4.1.2 Discussion

Potential environmental impacts from construction and operations and maintenance (O&M) of the No Project Alternative were analyzed for environmental impacts using the CEQA Environmental Checklist, which was used for analysis of the Proposed Project impacts in Chapter 3 – Environmental Impacts and Mitigation Measures. Although the No Project Alternative does not meet Proposed Project objectives, it was evaluated in accordance with CEQA Guidelines Section 1526.6 (e) to allow decision makers to compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project.

6.4.1.2.1 Aesthetics

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to aesthetics would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.2 Agriculture and Forestry Resources

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to agriculture or forestry resources would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.3 Air Quality

No construction or change in existing air quality conditions would occur as a result of the No Project Alternative. No impact to air quality would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.4 Biological Resources

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to biological resources would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.5 Cultural Resources

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to cultural resources would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.6 Energy

No construction or change in existing conditions would occur as a result of the No Project Alternative. San Diego County would not benefit from the additional supply of diverse energy supplies that the Proposed Project would provide and future load curtailment could occur. No impact to the wasteful, inefficient, or unnecessary consumption of energy would result from the No Project Alternative because nothing would be constructed, operated, or maintained. The No Project Alternative would not create a direct conflict or obstruction of a renewable energy or energy efficiency plan or policy. As with the Proposed Project, the No Project Alternative would result in no impact to a conflict with or obstruction of a state or local plan for renewable energy or energy efficiency.

6.4.1.2.7 Geology, Soils, and Paleontological Resources

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to geology, soils, or paleontological resources would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.8 Greenhouse Gas Emissions

No construction or change in existing conditions would occur as a result of the No Project Alternative. The No Project Alternative would not generate greenhouse gas (GHG) emissions. The No Project Alternative would not increase the reliability of the Proposed Project Area's power system to support electrification, and thus potentially reduce fossil fuel consumption. The No Project Alternative would not create a direct conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, as with the Proposed Project, the No Project Alternative would result in no impact to a conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

6.4.1.2.9 Hazards, Hazardous Materials, and Public Safety

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to hazards, hazardous materials, or public safety would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.10 Hydrology and Water Quality

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to hydrology or water quality would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.11 Land Use and Planning

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to land use and planning would result from the No Project Alternative because nothing would be constructed, operated, or maintained. The No Project Alternative would have a similar impact compared to the Proposed Project.

6.4.1.2.12 Mineral Resources

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to mineral resources would result from the No Project Alternative because nothing would be constructed, operated, or maintained. The No Project Alternative would have a similar impact compared to the Proposed Project.

6.4.1.2.13 Noise

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to noise would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.14 Population, Employment, and Housing

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to population, employment, or housing would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.15 Public Services

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to public services would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.16 Recreation

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to recreation would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.17 Transportation

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to transportation would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.18 Tribal Cultural Resources

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to tribal cultural resources would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.19 Utilities and Service Systems

No construction or change in existing conditions would occur as a result of the No Project Alternative. No additional utilities or service systems would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.2.20 Wildfire

No construction or change in existing conditions would occur as a result of the No Project Alternative. No impact to wildfire would result from the No Project Alternative because nothing would be constructed, operated, or maintained. As a result, the No Project Alternative would reduce the significance of the impact compared to the Proposed Project.

6.4.1.3 Conclusion

The changes in impacts to environmental resources for the No Project Alternative compared to the Proposed Project are summarized in Table 6-1: Summary of No Project Alternative Impacts Compared to the Proposed Project. The No Project Alternative would not meet any of the Proposed Project objectives.

6.4.2 Alternative Route 4

6.4.2.1 Description

As depicted in Attachment 6-C: Project Route Alternatives, Alternative Route 4 would connect with SDG&E's existing TL23021 and continue east along Ridge Hill Road and Pecan Park Lane for approximately 0.4 mile in an overhead configuration within or adjacent to an existing utility easement before transitioning to an underground configuration and turning southeast on Rios Canyon Road within or adjacent to an existing utility easement. Alternative Route 4 would travel along Rios Canyon Road in an underground configuration for approximately 0.8 mile within or adjacent to an existing utility easement before transitioning to an overhead configuration and traveling within or adjacent to an existing utility easement along Rios Canyon Road for approximately 0.4 mile. Alternative Route 4 would continue to travel east in an overhead configuration within or adjacent to an existing utility easement for approximately 1.3 miles. Alternative Route 4 would travel southeast in an overhead configuration within or adjacent to an existing utility easement for approximately 1 mile and would travel northeast in an overhead configuration for approximately 0.5 mile within or adjacent to an existing utility easement along Harbison Canyon Road. Alternative Route 4 was developed to shorten the route length of Alternative Route 4B, which is described in Section 6.4.3 Alternative Route 4B.

Alternative Route 4 would continue to travel east in an overhead configuration for approximately 1.1 miles within or adjacent to an existing utility easement and adjacent to residential neighborhoods for segments of the route before traveling east in an underground configuration along South Grade Road for approximately 0.3 mile within or adjacent to an existing utility easement. Alternative Route 4 would continue southeast for approximately 1.5 miles in an underground configuration within or adjacent to an existing utility easement along South Grade Road until reaching Tavern Road. Alternative Route 4 would continue southwest in an underground configuration along Tavern Road for approximately 0.6 mile within or adjacent to an existing utility easement.

Table 6-1: Summary of No Project Alternative Impacts Compared to the Proposed Project

Environmental Resource	Increase or Decrease in Impact Compared to Proposed Project	Significance of No Project Alternative	Significance of Proposed Project Impact
Aesthetics	Decrease	No Impact	LTS
Agriculture and Forestry Resources	Decrease	No Impact	LTS
Air Quality	Decrease	No Impact	LTS
Biological Resources	Decrease	No Impact	LTS After Mitigation
Cultural Resources	Decrease	No Impact	LTS
Energy	Increase	No Impact	LTS
Geology, Soils, and Paleontological Resources	Increase	LTS	LTS
Greenhouse Gas Emissions	Increase	No Impact	LTS
Hazards, Hazardous Materials, and Public Safety	Decrease	No Impact	LTS
Hydrology and Water Quality	Decrease	No Impact	LTS
Noise	Decrease	No Impact	LTS After Mitigation
Population, Employment, and Housing	Decrease	No Impact	LTS
Public Services	Decrease	No Impact	LTS
Recreation	Decrease	No Impact	LTS
Transportation	Decrease	No Impact	LTS After Mitigation
Tribal Cultural Resources	Decrease	No Impact	LTS
Utilities and Service Systems	Decrease	No Impact	LTS
Wildfire	Decrease	No Impact	LTS

Note: LTS = Less Than Significant. As discussed in Chapter 3 – Environmental Impacts and Mitigation Measures, the Proposed Project would result in no impact to certain environmental resource criteria from CEQA Appendix G. However, the Proposed Project's highest level of impact significance for each environmental resource was used to compare the No Project Alternative to the Proposed Project.

Alternative Route 4 would travel southeast along Tavern Road in an underground configuration for approximately 0.5 mile within or adjacent to an existing utility easement and then continue southeast along Japatul Road in an underground configuration for approximately 0.3 mile within or adjacent to an existing utility easement. Alternative Route 4 would transition to an overhead configuration at the intersection of Japatul Road and Sequan Truck Trail and follow Sequan Truck Trail south for approximately 0.7 mile in an overhead configuration before paralleling the existing SDG&E 69 kV transmission line for approximately 5.6 miles in an overhead configuration. Alternative Route 4 would cross the existing SDG&E 69 kV transmission line approximately 0.1 mile east of Japatul Road in an overhead configuration. Alternative Route 4 would parallel the Proposed Project alignment from a location approximately 0.2 mile east of Japatul Road to the existing Suncrest Substation in an overhead configuration. Alternative Route 4 would cross lands owned or managed by the CDFW, Endangered Habitats Conservancy, Sweetwater Authority, and USFS.

6.4.2.2 Discussion

Potential environmental impacts from construction and O&M of Alternative Route 4 were analyzed using the environmental resource criteria assessed for the Proposed Project. Potential impacts were compared to potential impacts from the Proposed Project.

6.4.2.2.1 Aesthetics

Scenic vistas in the area of Alternative Route 4 are similar to the Proposed Project and include foothills, mountains, and canyons. Consistent with the Proposed Project, primary viewer groups in the area of Alternative Route 4 are residents, motorists, and recreationists. Residents in the community of Alpine located north of Tavern Road and Japatul Road with south-facing views would have open views of canyons and mountains. Similarly, a few residents located on Tracey Lane and Montana Serena in the city of El Cajon have relatively open views of mountains. Construction during undergrounding of Alternative Route 4 may be visible to these residents north of Tavern Road and Japatul Road, but it would likely only be visible to a few residents (an estimated five or fewer homes). Most homes at these locations would be located at a higher elevation than Tavern Road and Japatul Road, which would not place construction activities on the road within a residential viewer's direct line of sight from their home. Once constructed, Alternative Route 4 would not be visible while traveling along Tavern Road or Japatul Road until reaching Sequan Truck Trail due to the underground configuration. Residences along Rios Canyon Road near Tracey Lane could view construction. During O&M of Alternative Route 4, the overhead alignment could have long-term impacts to residential views of scenic vistas near Tracey Lane and Montana Serena in El Cajon. Like the Proposed Project, homes located on Corte Dorado Espuela in Alpine may be able to view several of the poles along with mountain views as the alignment travels southeast in the area of Loveland Reservoir. Views of the poles would be distant, with the closest pole located approximately 0.3 mile from Corte Dorado Espuela and each successive pole traveling southeast along the alignment located even farther from Corte Dorado Espuela. It is estimated that five homes on Corte Dorado Espuela could have such views. Weathered steel poles would reduce the contrast of the poles against the hills and mountains, and non-specular conductors would reduce the general conductor visibility.

Alternative Route 4 would be constructed along South Grade Road, but motorists would not have views of scenic vistas from South Grade Road as the surrounding visual character is dominated

by residential homes. Along Japatul Road, motorists would have views of Alternative Route 4 and scenic vistas. However, Alternative Route 4 would parallel existing transmission infrastructure along the majority of Japatul Road and would not substantially adversely impact motorist views of scenic vistas.

Approximately 0.9 mile of Alternative Route 4 would cross the Crestridge Ecological Reserve in an overhead configuration, while the Proposed Project would be installed in an underground configuration in Crestridge Ecological Reserve for approximately 530 feet. From the dirt trail portion of Rios Canyon Road in the Crestridge Ecological Reserve, recreationists would likely be able to view Alternative Route 4, and Alternative Route 4 would cross Flinn Springs Trail. However, Alternative Route 4 would not substantially adversely affect any scenic vistas viewable from the trails as Alternative Route 4 would parallel existing distribution infrastructure at this location. Recreationists in the Loveland Reservoir area would have views of scenic vistas and temporary views of construction of Alternative Route 4. Once constructed, Alternative Route 4 would not substantially adversely impact recreationist views of scenic vistas in the Loveland Reservoir area as Alternative Route 4 would parallel exiting transmission infrastructure. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to scenic vistas. However, Alternative Route 4 may result in greater potential impacts to scenic vistas compared to the Proposed Project due to the longer crossing of Crestridge Ecological Reserve. Alternative Route 4 parallels existing distribution infrastructure in the Crestridge Ecological Reserve, but the structures installed along the route of Alternative Route 4 would likely be taller and wider than the existing utility infrastructure.

Alternative Route 4 would not be located within a highway eligible for designation or designated as a state scenic highway, and construction or O&M would not damage scenic resources within a state scenic highway. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to scenic resources within a state scenic highway.

Alternative Route 4 would cross an area of similar visual character to the Proposed Project, consisting of undeveloped areas, residential areas, and existing road ROWs in the unincorporated portions of San Diego County. Primary viewer groups with public views in the area include motorists and recreationists. As previously discussed, motorist views of Alternative Route 4 would be brief during construction and O&M. Within residential areas, views experienced from public roads and sidewalks in residential neighborhoods would constitute public views experienced from publicly accessible vantage points. Like the Proposed Project, such viewers are anticipated to be residents who live in the neighborhood. As with the Proposed Project, routine maintenance of the overhead and underground segments is expected to require approximately one trip per year by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and/or an assist truck. O&M activities would result in brief and infrequent impacts to the residential character of the neighborhoods.

From the dirt trail portion of Rios Canyon Road in the Crestridge Ecological Reserve, recreationists would likely be able to view Alternative Route 4, and Alternative Route 4 would cross Flinn Springs Trail. However, Alternative Route 4 would not substantially adversely affect the existing visual character or quality of public views as Alternative Route 4 would parallel existing distribution infrastructure at this location. Recreationists in the Loveland Reservoir area would have temporary views of construction of Alternative Route 4. Once constructed,

Alternative Route 4 would not substantially adversely impact the existing visual character or quality of public views in the Loveland Reservoir area as Alternative Route 4 would parallel exiting transmission line infrastructure.

Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to the existing visual character or quality of public views. However, Alternative Route 4 may result in greater potential impacts to public views compared to the Proposed Project due to the longer crossing of Crestridge Ecological Reserve. Alternative Route 4 parallels existing distribution infrastructure in the Crestridge Ecological Reserve, but the structures installed along Alternative Route 4 would likely be taller and wider than the existing utility infrastructure.

Consistent with the Proposed Project, glare from construction equipment for Alternative Route 4 would be transient and ephemeral. Night work is not anticipated to be necessary for construction of Alternative Route 4 or the Proposed Project but could be required in limited circumstances. For construction activities conducted at night, portable temporary lighting would be required. Like the Proposed Project, implementation of APM AES-04 would reduce light escape by directing lighting at the individual work areas. Non-specular conductors would be installed to reduce reflectivity in accordance with APM AES-03. In addition, the color of the tubular steel poles (TSPs) would be weathered steel, which would reduce glare as with the Proposed Project. Aeronautical obstruction lighting is not anticipated to be implemented as no structures would exceed 200 feet above ground level, and Alternative Route 4 would not be a new source of light. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to light or glare.

6.4.2.2.2 Agriculture

Like the Proposed Project, Alternative Route 4 would not be located on or convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agriculture use. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

Alternative Route 4, as with the Proposed Project, would cross County of San Diego (the County) agricultural zoning districts A70 and A72. However, neither Alternative Route 4 nor the Proposed Project would conflict with the A70 and A72 zones, as these designations allow Minor Impact Utilities with issuance of a Minor Use Permit and Major Impact Services and Utilities with a Major Use Permit. Like the Proposed Project, Alternative Route 4 would not cross lands under Williamson Act contracts. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to creating a conflict with existing zoning or Willaimson Act contracts.

Alternative Route 4 would cross land within the Cleveland National Forest (CNF) (which is managed by the USFS) for approximately the same distance as the Proposed Project. Consistent with the Proposed Project, Alternative Route 4 would not conflict with the existing zoning or cause rezoning of forest land. Like the Proposed Project, Alternative Route 4 would traverse lands within the CNF that are designated as Developed Areas Interface and Back Country Motorized Use Restricted, and major utility corridors are considered suitable uses within certain areas of these designations. Construction and O&M of Alternative Route 4 or the Proposed

Project would result in no impact to creating a conflict with zoning or causing rezoning of forest land.

Vegetation removal would be limited to the minimum necessary for construction and O&M of Alternative Route 4 or the Proposed Project. Vegetation removal within forest land for Alternative Route 4 would be restored in accordance with the Habitat Restoration and Revegetation Plan as with the Proposed Project. No impacts are anticipated to native forest or woodland vegetation within the CNF for Alternative Route 4 or the Proposed Project. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to the loss of forest land or conversion of forest land to non-forest use.

As with the Proposed Project, Alternative Route 4 would not construct access routes, structures, or other improvements in proximity to Important Farmland or forest land that could facilitate incompatible development. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

6.4.2.2.3 Air Quality

Alternative Route 4 would likely require the same equipment as the Proposed Project. Although the alignment of Alternative Route 4 would be approximately 11.2 miles longer compared to the Proposed Project, projected annual emissions are anticipated to be similar to those of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

The San Diego Air Pollution Control District (SDAPCD) is the agency responsible for managing local air quality, administering California and federal air pollution control programs, and ensuring attainment and maintenance of the ambient air quality standards. Like the Proposed Project, annual emissions associated with Alternative Route 4 construction would be temporary and would represent a small fraction of the regional emission inventories included in the applicable air quality plans. Construction of Alternative Route 4 or the Proposed Project would be performed in compliance with applicable air district rules and regulations, ensuring that activities would be consistent with air district efforts to achieve attainment and maintenance of the standards. The Alternative Route 4-related annual emissions or Proposed Project-related annual emissions occurring in compliance with these rules and regulations would not conflict with or obstruct implementation of the applicable air quality plans. Consistent with the Proposed Project, O&M of Alternative Route 4 would be incorporated into SDG&E's existing O&M program. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to creating a conflict with or obstructing implementation of an air quality plan.

Alternative Route 4 would have similar emissions as the Proposed Project during construction and O&M. As a result, it is anticipated that uncontrolled construction emissions from Alternative Route 4 likely would exceed applicable thresholds for respirable particulate matter (PM_{10}) and all other emissions would be below applicable thresholds. To reduce these construction emissions, compliance with applicable air district rules and regulations would occur for Alternative Route 4 or Proposed Project construction. With adherence to state and federal regulations, the controlled construction emissions from Alternative Route 4 or the Proposed

Project likely would not exceed the significance thresholds for any criteria air pollutants (CAPs). Like the Proposed Project, Alternative Route 4 O&M emissions would not exceed any operational thresholds due to minimal ground disturbance and a nominal increase in vehicle use for maintenance and inspection trips. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to a net increase in any CAP for which the Proposed Project region is non-attainment under an applicable air quality standard.

Alternative Route 4 would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. Like the Proposed Project, Alternative Route 4 would comply with applicable air district rules and regulations to reduce fugitive dust emissions. Construction of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to exposing sensitive receptors to substantial pollutant concentrations. However, Alternative Route 4 may result in greater potential impacts to sensitive receptors compared to the Proposed Project because Alternative Route 4 would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. O&M of Alternative Route 4 or the Proposed Project would result in no impact to exposing sensitive receptors to substantial pollutant concentrations.

Construction of Alternative Route 4 or the Proposed Project would generate odor from operation of diesel-powered construction equipment and vehicles. Such odors would be short-term and limited to the immediate vicinity of the activity. Consistent with the Proposed Project, O&M activities are currently conducted in this area and would be limited in duration (i.e., typically lasting one day at each structure location), and odor from fuel combustion would disperse quickly. Construction of Alternative Route 4 or the Proposed Project would have a less-than-significant impact to other emissions such as odors that would adversely affect a substantial number of people. However, Alternative Route 4 may result in greater potential impacts to sensitive receptors compared to the Proposed Project because Alternative Route 4 would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. O&M of Alternative Route 4 or the Proposed Project would result in no impact to other emissions such as odors that would adversely affect a substantial number of people.

6.4.2.2.4 Biological Resources

Alternative Route 4 would cross and/or would be located within 0.25 mile of California Natural Diversity Database (CNDDB) records for arroyo toad (*Anaxyrus californicus*), coastal California gnatcatcher (*Polioptila californica californica*), Encinitas baccharis (*Baccharis vanessae*), least Bell's vireo (*Vireo bellii pusillus*), San Diego thorn-mint (*Acanthomintha ilicifolia*), and western spadefoot (*Spea hammondii*) (CDFW 2024). Like the Proposed Project, construction of Alternative Route 4 could affect special-status plant and wildlife species. Alternative Route 4 is longer than the Proposed Project, but Alternative Route 4 would traverse residential areas for a greater length, where sensitive species and habitat are less likely to be encountered due to the previously disturbed nature of residential areas. However, approximately 4,752 feet of Alternative Route 4 would cross the Crestridge Ecological Reserve in an overhead configuration, while approximately 530 feet of the Proposed Project would cross the Crestridge Ecological Reserve outside of the existing road Vista de Montemar in an underground configuration.

Alternative Route 4 would also cross critical habitat for arroyo toad for approximately 0.6 mile and Hermes copper butterfly (*Lycaena hermes*) critical habitat for approximately 3.9 miles. In comparison, the Proposed Project would cross arroyo toad critical habitat for approximately 0.8 mile and Hermes copper butterfly critical habitat for approximately 3.1 miles. Consistent with the Proposed Project, impacts to sensitive species and habitats during construction would be temporary and intermittent in nature (lasting only as long as construction work at a given site) and would be limited in their potential geographic scope. Like the Proposed Project, impacts would be reduced with the implementation of MMs and APMs. Alternative Route 4 O&M activities may result in direct crushing of or potential vehicle or equipment strikes to individual special-status wildlife that may result in injury or mortality of individuals. Tree trimming and brush and weed control during O&M of Alternative Route 4 or the Proposed Project may result in bird nest and bat roost disruption or destruction. For this reason, vegetation management would be scheduled outside of the nesting bird season to the greatest extent feasible and vegetation removal would be limited to the minimum necessary to complete operations for Alternative Route 4 or the Proposed Project. The longer combined length of the overhead segments of Alternative Route 4 (approximately 11.7 miles) compared to the length of the overhead segment of the Proposed Project (approximately 11 miles) could result in greater vegetation trimming and removal during O&M of Alternative Route 4. Given the periodic but infrequent nature of these continuing operations, impacts would be less than significant for construction of Alternative Route 4 or the Proposed Project. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to sensitive species or their habitats after mitigation. However, the increased crossing length of the Alternative Route 4 alignment through Crestridge Ecological Reserve, increased crossing length of Hermes copper butterfly critical habitat, and potentially greater vegetation trimming and removal needs during O&M could marginally increase impacts to sensitive species or their habitats during construction and/or O&M compared to the Proposed Project after mitigation.

Like the Proposed Project, construction of Alternative Route 4 could impact riparian habitat or other sensitive natural communities. Alternative Route 4's overhead segments would be approximately 0.7 mile longer in length compared to the Proposed Project's overhead segment and require more poles compared to the Proposed Project. The difference in permanent impacts would be marginal between Alternative Route 4 and the Proposed Project as permanent impacts from pole installation would be approximately 11 square feet at each pole location for both Alternative Route 4 and the Proposed Project. Like the Proposed Project, Alternative Route 4 would implement MMs and APMs to verify the minimization of impacts to riparian habitat and other sensitive natural communities. Pre-construction biological surveys would be conducted and boundaries of areas supporting native vegetation and sensitive natural communities would be flagged for avoidance. A Worker Environmental Awareness Program (WEAP) training would be provided to verify contractor understanding and implementation of protective measures. In addition, mitigation strategies (such as special-status plant species restoration) would be implemented. During O&M of Alternative Route 4 or the Proposed Project, vegetation removal would be limited to the minimum necessary to complete operations. Given the periodic but infrequent nature of these continuing operations, impacts would be less than significant. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to riparian habitat or other sensitive natural communities after mitigation. However, construction and O&M of Alternative Route 4 could result in greater potential impacts to riparian habitat or other sensitive natural communities compared to the Proposed Project due

to a greater number of poles; any increase in impacts compared to the Proposed Project would likely be marginal after implementation of MMs and APMs.

Should any construction or O&M activities for Alternative Route 4 or the Proposed Project be required within jurisdictional waters, necessary permits and authorizations would be obtained prior to conducting activities in jurisdictional waters; these permits and authorizations could include a Section 404 Nationwide Permit from the U.S. Army Corps of Engineers (USACE), a Water Quality Certification and/or Waste Discharge Requirement from the Regional Water Quality Control Board (RWQCB), and/or a Section 1602 Lake and Streambed Alteration Agreement (LSAA) from the CDFW. Further, Alternative Route 4 or the Proposed Project would mitigate for any impacts to wetlands. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to state or federal protected wetlands after mitigation.

No wildlife nursery sites were identified within the Proposed Project Area, which partially overlaps with Alternative Route 4. Nursery sites are not anticipated to occur within the Alternative Route 4 areas due to its areas of similarity to the Proposed Project Area. Construction of Alternative Route 4 or the Proposed Project would temporarily affect only small, geographically dispersed areas at any one time, resulting in temporarily altered movement paths for individual wildlife, and would not create substantial barriers to movement. Once constructed, the poles would occupy small (i.e., pole base size of up to six feet in diameter), geographically dispersed areas around which terrestrial wildlife could move. However, new poles and lines could result in a risk of collisions for birds and interfere with the movement of individuals or flocks. To avoid impacts to avian movement from new structures, all new and replacement structures and conductor for Alternative Route 4 or the Proposed Project would be designed to follow the intent of Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee [APLIC] 2006, 2012), reducing potential impacts to avian movement to a less-than-significant level. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to the movement of wildlife. However, the increased length of the Alternative Route 4 alignment would marginally increase impacts to the movement of wildlife compared to the Proposed Project.

Consistent with the Proposed Project, Alternative Route 4 would be designed in a way that complies with local policies pertaining to wildlife and plants. Construction and O&M of Alternative Route 4 and the Proposed Project would result in no impact to a conflict with any local policies or ordinances protecting biological resources.

Alternative Route 4 would cross several of the Habitat Conservation Plans (HCPs); Natural Community Conservation Plans (NCCPs); and/or other approved local, regional, or state HCPs analyzed for the Proposed Project. The following plan areas would be crossed by Alternative Route 4:

- San Diego Multiple Species Conservation Program (MSCP),
- San Diego MSCP South San Diego County Subarea,
- San Diego County Water Authority NCCP/HCP,
- SDG&E Subregional NCCP/HCP, and

- SDG&E HCP Amendment.

Like the Proposed Project, Alternative Route 4 would implement MMs and APMs to reduce impacts to sensitive species and habitats. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact after mitigation to a conflict with the provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP.

The potential for new collision and electrocution risk from Alternative Route 4 or the Proposed Project would be limited to the overhead portion of the 230 kV transmission line. Alternative Route 4 would be designed to follow the intent of Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006, 2012), reducing potential impacts to collision or electrocution risk for avian or bat species. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to a substantial collision or electrocution risk for birds or bats. However, the increased overhead length of the Alternative Route 4 alignment by approximately 0.7 mile compared to the overhead alignment length of the Proposed Project would marginally increase impacts to a substantial collision or electrocution risk for birds or bats compared to the Proposed Project.

6.4.2.2.5 Cultural Resources

Portions of the Alternative Route 4 alignment were covered by the pedestrian survey of the Proposed Project's proposed study area. However, the majority of the Alternative Route 4 alignment was not covered by pedestrian survey efforts. Like the Proposed Project, Alternative Route 4 would avoid known historical resources and archaeological resources by spanning known resources to the extent possible. Preliminary desktop screening for cultural resources was conducted by SDG&E cultural resources staff, utilizing records search data under contract from the South Coastal Information Center (SCIC). The records search revealed six known cultural resources within the direct line of Alternative Route 4. Three of these resources can likely be avoided with pole placement, and the other three resources are likely not avoidable without a route change. Where full avoidance is determined to be infeasible, the historic or archaeological resources would be fully evaluated for California Register of Historical Resources (CRHR) eligibility. Alternative Route 4 would implement the same measure for unanticipated archaeological resource discoveries as the Proposed Project. In accordance with APM CUL-06, work would be halted in the immediate area of any unanticipated discovery to allow evaluation of the archaeological resource. For significant cultural resources that cannot be avoided, data recovery would be implemented under an approved SDG&E-prepared Data Recovery Plan. Although Alternative Route 4 is longer than the Proposed Project, both alignments present a risk of encountering undiscovered resources during construction. Further, the increased length of the Alternative Route 4 alignment by approximately 11.2 miles compared to the Proposed Project would be unlikely to contribute to a greater likelihood of encountering undiscovered resources as Alternative Route 4 traverses previously disturbed residential areas and existing roads for a greater distance. Consistent with the Proposed Project, O&M of Alternative Route 4 would be incorporated into SDG&E's existing O&M program and would not involve substantial ground disturbance. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact after mitigation to the substantial adverse change in the significance of a historical or archaeological resource.

Like the Proposed Project, if human remains are inadvertently discovered during construction activities, all work would halt within a 50-foot radius of the remains discovered on Alternative Route 4. SDG&E would follow all applicable regulations and contact the County coroner. If the remains are determined to be Native American or other Native American cultural items are uncovered on federal land, the remains and/or cultural items would be treated in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA). Work would remain suspended in the area of the discovery until treatment options are identified. Although Alternative Route 4 is longer than the Proposed Project, both alignments present a risk of encountering human remains during construction. Further, the increased length of the Alternative Route 4 alignment by approximately 11.2 miles compared to the Proposed Project would be unlikely to contribute to a greater likelihood of encountering undiscovered human remains as Alternative Route 4 traverses previously disturbed residential areas and existing roads for a greater distance. O&M of Alternative Route 4 would be incorporated into SDG&E's existing O&M program and would not involve substantial ground disturbance, as would be the case for the Proposed Project. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to the disturbance of any human remains. O&M of Alternative Route 4 or the Proposed Project would result in no impact to the disturbance of any human remains.

6.4.2.2.6 Energy

Alternative Route 4 would likely require the same equipment as the Proposed Project. Although, the alignment of Alternative Route 4 would be approximately 11.2 miles longer in length compared to the Proposed Project, projected fuel consumption is anticipated to be similar to that of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

Like the Proposed Project, Alternative Route 4 would require the short-term consumption of fossil fuel resources to power equipment, helicopters, and vehicles used during construction. Construction would utilize electrical energy from the existing distribution system or a generator to temporarily power construction trailers, lighting, and other equipment. Construction activities would likely constitute a similar percent of total diesel and gasoline consumption in the entirety of San Diego County as the Proposed Project, which would represent less than 0.02 percent of annual fuel use for each of the following fuel categories in California: gasoline, diesel, and jet fuel. Consistent with the Proposed Project, O&M of Alternative Route 4 would be incorporated into SDG&E's existing O&M program. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to the consumption of energy.

As with the Proposed Project, Alternative Route 4 would not conflict with the long-term goals of the state Renewable Portfolio Standards Program or state or local renewable energy or energy efficiency plans. Alternative Route 4 or the Proposed Project would represent a short-term increase in use of fuel during construction and minor amounts of electricity and fuel resources consumed during O&M. Neither Alternative Route 4 nor the Proposed Project would prevent renewable energy sources from being used or create significant use of energy resources that could conflict or obstruct state or local renewable energy or energy efficiency plans.

Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to a state or local plan for renewable energy or energy efficiency.

6.4.2.2.7 Geology, Soils, and Paleontological Resources

Like the Proposed Project, Alternative Route 4 would not cross any active or potentially active faults, but Alternative Route 4 would be located within 10 miles of potentially active faults and thus would be susceptible to earthquake forces and seismic shaking. Like the Proposed Project, Alternative Route 4 would cross liquefaction areas and areas mapped by the U.S. Geological Survey (USGS) as having landslide potential. Alternative Route 4 or the Proposed Project would be designed to be consistent with CPUC General Order (GO) 95, the California Building Code (CBC), and the geotechnical engineering report prepared in accordance with APM GEO-01. Consistent with the Proposed Project, Alternative Route 4 would incorporate standard engineering practices and recommendations from the geotechnical engineering report to reduce seismic-related risks to the structures. O&M activities for Alternative Route 4 or the Proposed Project would not involve substantial ground disturbance or installation of new features that would expose people or structures to seismic hazards. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact related to the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, and landslides. O&M of Alternative Route 4 or the Proposed Project would result in no impact related to the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, and landslides.

Areas temporarily impacted by construction of Alternative Route 4 or the Proposed Project could result in the loss of topsoil if topsoil is present in work areas. Similarly, areas permanently impacted by construction of Alternative Route 4 or the Proposed Project would result in the loss of topsoil if topsoil exists in permanent impact areas. Alternative Route 4 could result in greater topsoil loss as the combined length of the overhead segments would be approximately 0.7 mile longer compared to the overhead segment of the Proposed Project, resulting in the installation of more poles. SDG&E would develop and implement a Storm Water Pollution Prevention Plan (SWPPP) and adhere to SDG&E's Water Quality Construction Best Management Practices (BMPs) Manual to minimize erosion for Alternative Route 4 or the Proposed Project. The SWPPP and associated BMPs would be implemented to minimize soil erosion during construction and to reduce impacts to a less-than-significant level. Like the Proposed Project, O&M activities would not involve substantial ground disturbance. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to soil erosion or the loss of topsoil. However, construction Alternative Route 4 may result in a marginal increase in the loss of topsoil compared to construction of the Proposed Project due to the longer combined length of the overhead segments of Alternative Route 4. O&M of Alternative Route 4 or the Proposed Project would result in no impact to soil erosion or the loss of topsoil.

Like the Proposed Project, Alternative Route 4 would cross potential liquefaction areas and areas mapped by the USGS as having landslide potential. As previously described, consistent with the Proposed Project, Alternative Route 4 would be designed to be consistent with CPUC GO 95 and the CBC, as well as the geotechnical engineering report prepared in accordance with APM GEO-01, which will include avoiding the installation of Alternative Route 4 structures on

unstable soils. Imported fill and/or topsoil would be used to backfill trenches associated with Alternative Route 4 or the Proposed Project, which would stabilize the existing geologic conditions and reduce the potential for movement resulting from unstable geologic units. Like the Proposed Project, O&M activities for Alternative Route 4 would not involve substantial ground disturbance. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact from the risk of landslides, lateral spreading, subsidence, liquefaction, and collapse. O&M of Alternative Route 4 or the Proposed Project would result in no impact from the risk of landslides, lateral spreading, subsidence, liquefaction, and collapse.

Like the Proposed Project, Alternative Route 4 would cross soils classified as Hydrologic Group D, which is characterized by high clay content that could exhibit shrink-swell characteristics. In accordance with APM GEO-01, recommendations from the geotechnical engineering report (such as increasing pole depth) would be incorporated into the design of Alternative Route 4 or the Proposed Project if expansive soils are identified where the poles would be located. Therefore, the structures are anticipated to be buried below expansive soils, as defined in the 1994 Uniform Building Code. Underground segments of Alternative Route 4 or the Proposed Project would be encased in a concrete duct bank and not susceptible to potentially expansive soils. Like the Proposed Project, O&M activities would not involve substantial ground disturbance or installation of new structures. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to posing substantial risks to life or property.

Construction and O&M of neither Alternative Route 4 nor the Proposed Project would involve use of a septic tank or alternative wastewater disposal system. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to soils that may not be able to adequately support septic tanks or alternative wastewater disposal systems.

Based on paleontological resources occurrence potential mapped for the Proposed Project, Alternative Route 4 is anticipated to also cross geologic units with low and very low potential for paleontological resources to occur. Construction of Alternative Route 4 or the Proposed Project would be unlikely to damage a unique paleontological resource or site or unique geologic feature due to the likely low and very low potentials for paleontological resources to occur in the underlying geologic units. Like the Proposed Project, O&M activities would not involve substantial ground disturbance. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to destroying a unique paleontological resource or site or unique geological feature.

6.4.2.2.8 Greenhouse Gas Emissions

Alternative Route 4 would likely require the same equipment as the Proposed Project. Although the alignment of Alternative Route 4 would be longer in length compared to the Proposed Project, projected GHG emissions are anticipated to be similar to that of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

When amortized over an assumed 20-year life, the Proposed Project's construction carbon dioxide equivalent (CO_2e) emissions are reduced to approximately 722.1 metric tons of CO_2e ($MTCO_2e$), which is well below the threshold of 900 $MTCO_2e$. Annual total CO_2e emissions

during O&M would be well below the County's threshold of 900 $MTCO_2e$. Alternative Route 4 would likely have similar emissions as the Proposed Project during construction and O&M. Both Alternative Route 4 and the Proposed Protect would result in a similar and less-than-significant impact to the generation of GHG emissions that may have a significant impact on the environment.

As with the Proposed Project, Alternative Route 4 would improve reliability of the area's power system, which may then support additional electrification of customer operations, thereby reducing GHG emissions. Like the Proposed Project, O&M of Alternative Route 4 would require approximately one vehicle trip per year for regular O&M activities and would not involve a significant use of fossil fuels, resulting in negligible GHG emissions. Construction and O&M of Alternative Route 4 or the Proposed Project would not conflict with an applicable plan, policy, or regulation for reducing GHG emissions.

6.4.2.2.9 Hazards and Hazardous Materials

Alternative Route 4 would require the same types and limited quantities of hazardous materials and procedures to prevent and clean up spills as would be required for the Proposed Project. Refueling of equipment and vehicles would typically take place at staging yards. Fuels and hazardous materials kept at these locations would be stored within secondary containment to minimize potential releases. In addition, SDG&E construction crews would keep spill kits on site for use in the event of a spill, in accordance with SDG&E's Water Quality Construction BMPs Manual. SDG&E would be required to comply with laws, rules, and regulations governing the proper handling and disposal of hazardous materials for Alternative Route 4 or the Proposed Project. As they would for the Proposed Project, materials used during O&M of Alternative Route 4 would be applied, stored, and disposed of by licensed professionals and in accordance with applicable regulations and manufacturer recommendations. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to creating a risk to the public or environment from the routine use, transport, storage, and disposal of hazardous materials.

SDG&E would implement its Water Quality Construction BMPs Manual and maintain spill kits on site to minimize the potential for spills and respond to potential releases of hazardous materials during construction of Alternative Route 4 or the Proposed Project. During O&M of Alternative Route 4 or the Proposed Project, SDG&E would maintain spill kits in maintenance vehicles. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to creating a risk to human health or environment from reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

Alternative Route 4 would be located within 0.25 mile of Creekside Early Learning Center, Shadow Hills Elementary, Rios Elementary, Mountain View Learning Academy, and Boulder Creek Elementary. The Proposed Project would not be located within 0.25 mile of schools. Alternative Route 4 would require the same types and limited quantities of hazardous materials and procedures to prevent or clean spills as would be required for the Proposed Project. Refueling of equipment and vehicles would typically take place at staging yards. Fuels and hazardous materials kept at these locations would be stored within secondary containment to minimize potential releases. In addition, SDG&E construction crews would keep spill kits on site for use in the event of a spill. SDG&E would be required to comply with laws, rules, and

regulations governing the proper handling and disposal of hazardous materials. Materials used during O&M of Alternative Route 4 would be applied, stored, and disposed of by licensed professionals and in accordance with applicable regulations and manufacturer recommendations as they would for the Proposed Project. Construction and O&M of Alternative Route 4 would result in a less-than-significant impact to emitting hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Construction and O&M of the Proposed Project would result in no impact. Alternative Route 4 would result in a greater potential impact compared to the Proposed Project, which would not be located within 0.25 mile of an existing or proposed school.

Based on review of the State Water Resources Control Board's (SWRCB's) GeoTracker database and the Department of Toxic Substances Control's (DTSC's) EnviroStor database, Alternative Route 4 would not be located on a known hazardous site with an existing or past release, and neither would the Proposed Project. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to creating a significant hazard to the public or environment due to being located on a hazardous materials site.

Neither Alternative Route 4 nor the Proposed Project would be located within 2 miles of a public airport or within the boundaries of an airport land use plan. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to a safety hazard for people residing or working in the Proposed Project Area.

Temporary closures during the construction of Alternative Route 4 or the Proposed Project would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. Like the Proposed Project, Alternative Route 4 would implement MM TRA-1, and emergency service providers would be provided notice before commencement of construction activities that would require lane closures. In particular, undergrounding is anticipated to require temporary closures. The Proposed Project would be installed in an underground configuration along La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive for approximately 2.55 miles. In contrast, Alternative Route 4 would be installed in an underground configuration along Rios Canyon Road, South Grade Road, Tavern Road, and Japatul Road for a combined distance of approximately 4.1 miles. Neither Alternative Route 4 nor the Proposed Project would cross any interstates that could potentially be used as evacuation routes. O&M of the new underground facilities for Alternative Route 4 or the Proposed Project may require temporary lane closures. Traffic control measures would be implemented, and emergency vehicles would be provided access for Alternative Route 4 or the Proposed Project. Construction of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact after mitigation to an emergency response or emergency evacuation plan. However, construction of Alternative Route 4 would result in a greater potential impact to lane closures as the route would be installed in an underground configuration along a longer length of roads compared to the Proposed Project. O&M of Alternative Route 4 or the Proposed Project would result in no impact to an emergency response or emergency evacuation plan.

Like the Proposed Project, Alternative Route 4 would be located in CPUC Tier 2 and Tier 3 High Fire Threat Districts (HFTDs). Alternative Route 4 would cross Tier 2 HFTDs for approximately 6.2 miles (approximately 3.0 miles longer than the Proposed Project) and Tier 3 HFTDs for

approximately 9.5 miles (approximately 11.8 miles shorter than the Proposed Project). Consistent with the Proposed Project, Alternative Route 4 construction personnel could be exposed to a wildland fire during construction. Risk to personnel would most likely come from the inability to avoid or escape a wildland fire. To prevent wildfires during construction of Alternative Route 4 or the Proposed Project, SDG&E would implement its Fire Prevention Plan, which includes training; drills; procedures for fire response, reporting, and prevention; necessary fire prevention equipment; coordination with local and federal fire officials; and identification of daily site-specific risk conditions. Consistent with the Proposed Project, during O&M of Alternative Route 4, SDG&E's vegetation management programs would clear vegetation adjacent to transmission lines within CPUC HFTDs and would clear vegetation within a 10-foot radius of poles within areas of California Department of Forestry and Fire Protection (CAL FIRE) jurisdiction. A majority of O&M activities for Alternative Route 4 or the Proposed Project would be conducted along existing paved roads where the risk of igniting vegetation is generally low. Construction and O&M of Alternative Route 4 and the Proposed Project would result in a less-than-significant impact to exposing people or structures to a significant risk of loss, injury, or death from wildland fires. However, Alternative Route 4 may result in greater potential impacts to people and structures compared to the Proposed Project because Alternative Route 4 would exist in close proximity to a greater number of residences compared to the Proposed Project.

6.4.2.2.10 Hydrology and Water Quality

Similar to the Proposed Project, construction of Alternative Route 4 would require ground-disturbing activities that could increase soil erosion rates that could potentially result in sedimentation or the discharge of fill in in adjacent or downstream waterbodies, which would be a violation of water quality standards. Materials used during construction (e.g., diesel fuel, hydraulic fluid, oils, grease, and concrete) have the potential to be transported by storm water runoff and threaten aquatic life or groundwater quality in the event of spills or leaching for Alternative Route 4 or the Proposed Project. These materials could violate water quality standards if they contact storm water discharges and/or are transported to nearby water resources.

SDG&E's standard WEAP would be implemented for Alternative Route 4 or the Proposed Project and include training on the transport, handling, and disposal of hazardous materials. As with the Proposed Project, SDG&E would implement the BMPs included in SDG&E's Water Quality Construction BMPs Manual to avoid and minimize impacts to water quality. A SWPPP would be developed for Alternative Route 4 or the Proposed Project; this SWPPP would assess the risk to water quality based on site-specific soil characteristics, slope, and the construction schedule, and it would implement appropriate BMPs to provide protection of water quality. The SWPPP would specify measures for each activity that has the potential to degrade surrounding water quality. If temporary and/or permanent ground disturbance impacts to water features could not be avoided by Alternative Route 4 or the Proposed Project, SDG&E would secure the required permits and comply with the terms of the permits to avoid or reduce impacts to water quality. During O&M of Alternative Route 4 or the Proposed Project, materials would be applied, stored, and disposed of with appropriate containment in a manner consistent with manufacturer recommendations and in accordance with applicable regulations. No additional ground disturbance is anticipated during O&M. The O&M activities for Alternative Route 4 or the Proposed Project may include intermittent dewatering of utility vaults; however, SDG&E

would obtain coverage under the Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Utility Vaults and Underground Structures to Waters of the U.S. (General Order 2014-0174-DWQ) and adhere to the requirements therein. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to water quality standards or waste discharge requirements. However, O&M of Alternative Route 4 could require increased dewatering of utility vaults compared to the Proposed Project due to the likely greater number of utility vaults along the longer underground alignment of Alternative Route 4 compared to the Proposed Project.

Structure foundations would be up to 40 feet below ground level, which is consistent with the embedment depth for the Proposed Project structures, and groundwater is not anticipated to be encountered. If groundwater is encountered during Alternative Route 4 or Proposed Project construction, excavations would be dewatered using one or more pumps and the water would be discharged on site, if permitted, or stored in Baker tanks or similar water retention equipment within staging areas prior to disposal off site. Consistent with the Proposed Project, SDG&E would confirm that the water sources used during construction of Alternative Route 4 would have adequate capacity prior to sourcing water from them. O&M of Alternative Route 4 would not require or deplete groundwater as O&M would not require water beyond what is used at the existing Suncrest Substation and impervious surfaces would not be expanded or newly installed. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to groundwater supplies or recharge. O&M of Alternative Route 4 or the Proposed Project would result in no impact to groundwater supplies or recharge.

As with the Proposed Project, grading involved during construction could increase the existing velocity or volume of storm water flows either on site or in off-site areas. However, consistent with the Proposed Project, temporary work areas disturbed during grading would be restored to their original contours, and the surrounding area would be restored and repaired, as appropriate. Alternative Route 4 or the Proposed Project would implement runoff prevention and control measures. Permanent work areas would be designed to maintain existing flow patterns and flow velocities by outsloping and the use of rock energy dissipaters as needed. Vegetation removal, restoration, and grading would be conducted in accordance with the BMPs outlined in the SWPPP. If temporary and/or permanent ground disturbance impacts to water features could not be avoided by Alternative Route 4 or the Proposed Project, SDG&E would secure the required permits and comply with the terms of the permits to reduce impacts to existing drainage patterns and hydrology. Consistent with the Proposed Project, O&M would not involve any activities that would require the alteration of drainage patterns or the increase of impervious surfaces. Maintenance of Alternative Route 4 or the Proposed Project would be performed by small crews traveling on established access roads and would not require water beyond what is currently used at the existing Suncrest Substation. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to existing drainage patterns. O&M of Alternative Route 4 or the Proposed Project would result in no impact to existing drainage patterns.

Alternative Route 4 would cross a portion of a Federal Emergency Management Agency (FEMA) Zone A along Ridge Hill Road in an overhead configuration, a portion of a FEMA Zone A along Rios Canyon Road in an underground configuration, and a portion of a FEMA Zone A along Harbison Canyon Road in an overhead configuration. Each crossing length would

be between 100 and 250 feet. The Proposed Project would span a FEMA Flood Zone AE. Zone A corresponds to a 100-year flood zone and Zone AE corresponds to a 100-year flood zone where base flood elevations are known. The Alternative Route 4 overhead segment would span Zone A flood zones where feasible, but permanent structure placement may be required within the flood zone in certain areas. If permanent structure placement is required within the flood zone, surface water would flow around the structure, and the concrete foundations and steel structure would be unlikely to release pollutants during a flood event. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to the risk of pollutants in a flood hazard, tsunami, or seiche zone. However, Alternative Route 4 could result in marginally greater potential impacts to risk of pollutants within a flood zone compared to the Proposed Project, as a permanent structure could be placed within a flood zone.

During construction of Alternative Route 4 or the Proposed Project, BMPs would be implemented to reduce the potential for the discharge of water pollutants in accordance with the statewide Construction General Permit (CGP) and San Diego Basin Plan. Like the Proposed Project, water use during construction and O&M would be relatively minimal and provided in coordination with the local water agencies. Further, there is currently no existing sustainable groundwater management plan for the groundwater basins in which Alternative Route 4 or the Proposed Project would be located. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to a water quality control plan or sustainable groundwater management plan.

6.4.2.2.11 Land Use and Planning

Like the Proposed Project, Alternative Route 4 would traverse residential neighborhoods but would parallel existing utility corridors where feasible. Short-term construction activities (e.g., temporary lane closures, construction staging, and equipment movement) could temporarily limit access within residential areas but would not divide communities. Once operational, neither Alternative Route 4 nor the Proposed Project would alter existing circulation patterns, block access, or otherwise divide established communities. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to physically dividing an established community.

Alternative Route 4 would cross areas where the following land use plans that apply to the Proposed Project would also apply:

- Southern California National Forests Land Management Plan,
- Region 5 Supplement to Forest Service Manual 2700, and
- San Diego County General Plan.

The consistency analysis for these land use plans that is described in Section 3.12 Land Use and Planning for the Proposed Project also applies to Alternative Route 4, and the analysis did not identify any inconsistencies with any land use plans. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no conflict with any land use plan, policy, or regulation.

6.4.2.2.12 Mineral Resources

Alternative Route 4 would cross an area designated as Mineral Resources Zone- (MRZ-) 3—which corresponds to areas containing known or inferred mineral occurrences of undetermined mineral resource significance—for approximately 9 miles, which is approximately 2 miles longer than the Proposed Project would cross an area with this designation. Like the Proposed Project, no active mines or designated extraction areas intersect Alternative Route 4, and Alternative Route 4 would not cross any areas zoned for extractive mineral use. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to the loss of availability of a known mineral resource that would be of value to the region or the residents of the state or impact to the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

6.4.2.2.13 Noise

Trench excavation during construction of Alternative Route 4 is anticipated to use the same equipment and excavation techniques as the Proposed Project. The Proposed Project was modeled to generate a maximum eight-hour noise level of approximately 89.4 A-weighted decibels (dBA) during trench excavation at the proposed 230 kV underground segment, which would be significant for residences within 160 feet of construction. Only portions of the approximately 3.1-mile-long proposed 230 kV western underground segment (approximately 2.55 miles along La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive) would be installed within 160 feet of residences. Alternative Route 4 would install approximately 2.9 miles of transmission line in an underground configuration along South Grade Road and Tavern Road in the community of Alpine through a residential area where numerous houses would be located within 160 feet of construction. Like the Proposed Project, implementation of MM NOI-01 would reduce the noise levels created by Alternative Route 4 construction to be within County thresholds and would provide compensation to residents for temporary relocation where noise levels cannot be reduced to below 75 dBA on average over an eight-hour period. Additionally, the implementation of APM NOI-01 would maintain construction of Alternative Route 4 adheres to the County's Noise Ordinance in instances where Proposed Project activities are required outside of typical construction hours. During O&M, the corona level of the overhead segment of Alternative Route 4 would be similar to the Proposed Project as both are 230 kV lines. A 230 kV overhead transmission line would be expected to generate approximately 36 dBA directly below the line in foul weather. This noise would be generally below existing ambient levels at the nearest sensitive receptors and well below any applicable noise standards. Like the Proposed Project, Alternative Route 4 would be installed in an underground configuration for approximately 4.1 miles and underground portions would be inaudible during normal operation. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to an increase in ambient noise levels in excess of standards after mitigation. However, construction of Alternative Route 4 would likely result in a greater potential impact to residences compared to construction of the Proposed Project because a greater number of residents would likely need to be relocated if noise cannot be reduced to be within County thresholds.

Vibratory rollers generate ground-borne vibration levels of 0.21-inch-per-second peak particle velocity (PPV) at 25 feet, and the Federal Transit Administration's (FTA's) threshold of significance is 0.2-inch-per-second PPV for building structural damage (non-engineered timber

and masonry buildings) (FTA 2018). Therefore, ground-borne vibration from the use of a vibratory roller would exceed the threshold of significance if the use occurs within 26 feet of a sensitive receptor. Alternative Route 4 would require repaving after installation of the underground segment. The repaving work could likely occur within 26 feet of several sensitive receptors along South Grade Road and Tavern Road. As a result, construction of Alternative Route 4 could result in a potentially significant impact that likely cannot be mitigated. Like the Proposed Project, O&M of Alternative Route 4 would not involve equipment that would generate ground-borne vibration or noise in excess of significance criteria for structural damage. Construction of Alternative Route 4 would result in a potentially significant impact to excessive ground-borne vibration or noise levels, and construction of the Proposed Project would result in a less-than-significant impact to excessive ground-borne vibration or noise levels. O&M of Alternative Route 4 or the Proposed Project would result in no impact to excessive ground-borne vibration or ground-borne noise levels.

Neither Alternative Route 4 nor the Proposed Project would be located within the vicinity of a private airstrip or within 2 miles of a public airport or public use airport. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to exposing people residing or working at the site to excessive noise levels from aircraft.

6.4.2.2.14 Population, Employment, and Housing

Like the Proposed Project, Alternative Route 4 would not introduce any new housing, businesses, or other land use changes that would induce substantial unplanned population growth or housing demand in or near Alternative Route 4. Construction of Alternative Route 4 would require a similar crew size as the Proposed Project and would be constructed by current SDG&E employees and/or subcontractors. O&M of Alternative Route 4 would be performed by current SDG&E employees who are local to the area. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to inducing substantial unplanned population growth.

Alternative Route 4 would not cause the substantial displacement of existing people or housing. Compared to the Proposed Project, Alternative Route 4 would be located south of a home where potential relocation of the residents may be required for the Proposed Project. However, Alternative Route 4 could require the relocation of other residents in excess of potential relocations required for the Proposed Project due to Alternative Route 4's proximity to residences. An estimated number of relocations has not been determined at this time. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to the substantial displacement of existing people or housing. However, construction and O&M of Alternative Route 4 could result in the displacement of a greater number of existing people or houses compared to construction and O&M of the Proposed Project.

6.4.2.2.15 Public Services

In the event of a fire, a temporary increase in the demand for fire services would occur. However, neither Alternative Route 4 nor the Proposed Project would require an expansion of fire services or new or physically altered fire departments to maintain acceptable response times and service ratios. To minimize the risk of starting a fire, vehicles would not be staged or parked

on vegetation, and SDG&E would clear and trim vegetation in work areas prior to construction. Additionally, and consistent with the Proposed Project, SDG&E would implement its Fire Prevention Plan during construction of Alternative Route 4. Any road closures required during construction of Alternative Route 4 or the Proposed Project would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to the provision of new or physically altered fire facilities to maintain service ratios or response times.

The need for police services may arise during construction (e.g., for theft or vandalism of construction equipment) of Alternative Route 4 or the Proposed Project, but the need would not exceed the capacity of the existing providers in the vicinity and would not require services beyond existing capacities. Consistent with the Proposed Project, any road closures required during construction of Alternative Route 4 would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to the provision of new or physically altered police facilities to maintain service ratios or response times.

Construction of a portion of Alternative Route 4 would occur along Harbison Canyon Road, which is used to access Shadow Hills Elementary, Creekside Early Learning Center, and Old Ironsides County Park. Construction of a portion of Alternative Route 4 would also occur along Tavern Road, which is used to access Boulder Creek Elementary and Joan MacQueen Middle School. Any temporary road closures would be coordinated with local jurisdictions through the encroachment permit process and any required traffic control plans. These permits may require the application of appropriate traffic control measures during this work to verify that disruptions to school access and parking availability are minimized. No temporary park closures are anticipated during the construction of Alternative Route 4 or the Proposed Project. Similarly, construction of Alternative Route 4 or the Proposed Project is not anticipated to impact other public facilities such as hospitals and community centers due to their distance from Alternative Route 4 and the Proposed Project and the scope of construction. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to the provision of new or physically altered schools, parks, or other public facilities to maintain service ratios. However, Alternative Route 4 may result in delays in access to public facilities for a greater number of users compared to the Proposed Project.

6.4.2.2.16 Recreation

Like the Proposed Project, Alternative Route 4 would cross the Loveland Reservoir Trail and California Riding and Hiking Trail (CRHT), and trail use at the points of the transmission line crossings would be temporarily and intermittently close during construction of the transmission line. Alternative Route 4 would also cross the Flinn Springs Trail and an unnamed trail extending

from the dirt portion of Rios Canyon Road in the Crestridge Ecological Reserve. Consistent with the Proposed Project, SDG&E would implement APM REC-01 to post signage at the trails, include closure information on facility websites, and provide advanced notice of Alternative Route 4 or Proposed Project activities prior to construction. In accordance with APM REC-02, SDG&E would give advance notice of Alternative Route 4 or Proposed Project activities to authorities for recreational facilities subject to access restrictions no less than four weeks prior to construction.

Similar to the Proposed Project, temporary trail closures may result in minor, temporary increased use of other trails. However, as only approximately four existing trails may require temporary and partial closures during construction of Alternative Route 4, the trail closures would not result in a significant increase in the use of existing parks or recreational facilities. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated. However, Alternative Route 4 would result in a greater number of temporary trail closures compared to the Proposed Project.

Neither Alternative Route 4 nor the Proposed Project would include the construction of any recreational facilities. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area, and O&M would not increase the use of existing parks or other recreational facilities. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to the construction or expansion of recreational facilities.

6.4.2.2.17 Transportation

SDG&E would obtain an encroachment permit from the County, which would include conditions (e.g., work site traffic control plans) that would minimize traffic delays during construction of Alternative Route 4 or the Proposed Project. In accordance with MM TRA-01, traffic control plans for Alternative Route 4 or the Proposed Project would implement protective measures such as lighting, flaggers, traffic control cones, electronic signage, fixed roadway warning signs, and any other measures required by the Director of the County's Department of Public Works to protect the traveling public. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to conflicting with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities after mitigation.

The estimated daily vehicle miles traveled (VMT) during construction of Alternative Route 4 would be similar to the estimated daily VMT of the Proposed Project. Increase in San Diego County's VMT from construction of Alternative Route 4 would be periodic and temporary depending on the location of construction workers and work areas. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area, and annual checks and periodic maintenance trips would result in a negligible annual VMT. Construction and O&M of Alternative Route 4 or the Proposed Project would

result in a similar and less-than-significant impact to conflicting or being inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Neither Alternative Route 4 nor the Proposed Project would require the construction of geometric design features that would increase hazards. Encroachment permits from the County would be secured as required and corresponding traffic control plans would be prepared, approved by the County, and implemented prior to any lane closures. In accordance with MM TRA-01, prior to construction of Alternative Route 4 or the Proposed Project, appropriate traffic control measures would be configured adjacent to egress and ingress locations at each work area within roadways, such as lighting, flaggers, traffic control cones, electronic signage, and fixed roadway warning signs. O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area, and it would not introduce geometric design features or incompatible uses. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to increasing hazards due to a geometric design feature or incompatible uses after mitigation.

Temporary closures during construction of Alternative Route 4 or the Proposed Project would be coordinated with County and emergency service providers through the encroachment permit process. Like the Proposed Project, Alternative Route 4 would implement MM TRA-1, and emergency service providers would be provided notice before commencement of construction activities that would require lane closures. In particular, undergrounding is anticipated to require temporary closures. The Proposed Project would be installed in an underground configuration along La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive for approximately 2.55 miles. In contrast, Alternative Route 4 would be installed in an underground configuration along Rios Canyon Road, South Grade Road, Tavern Road, and Japatul Road for a combined distance of approximately 4.1 miles. O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area, and annual checks and periodic maintenance trips would result in a negligible increase in annual VMT. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to emergency access after mitigation. However, construction and O&M of Alternative Route 4 would result in a greater potential impact to lane closures as the route would be installed in an underground configuration along a longer length of roads compared to the Proposed Project.

6.4.2.2.18 Tribal Cultural Resources

Portions of the Alternative Route 4 alignment were covered by the pedestrian survey of the Proposed Project's study area. However, the majority of the Alternative Route 4 alignment was not covered by pedestrian survey efforts. Alternative Route 4 would implement the same measure for unanticipated tribal cultural resource discoveries as the Proposed Project. In accordance with APM TRIB-01, inadvertent discoveries of tribal cultural resources during construction will halt operations within 50 feet, requiring immediate communication with the Native American monitor, Principal Investigator, and SDG&E's Cultural Resource Specialist, who will determine necessary actions in coordination with CPUC before resuming work.

Although Alternative Route 4 is longer than the Proposed Project, both alignments present a risk of encountering undiscovered resources during construction. Further, the increased length of the Alternative Route 4 alignment by approximately 11.2 miles compared to the Proposed Project would be unlikely to contribute to a greater likelihood of encountering undiscovered resources as

Alternative Route 4 traverses previously disturbed residential areas and existing roads for a greater distance. O&M of Alternative Route 4 would be incorporated into SDG&E's existing O&M program and would not involve substantial ground disturbance. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to the substantial adverse change in the significance of a tribal cultural resource. O&M of Alternative Route 4 or the Proposed Project would result in no impact to the substantial adverse change in the significance of a tribal cultural resource.

6.4.2.2.19 Utilities and Service Systems

Alternative Route 4 would result in similar water use, sanitary waste, and storm water runoff as the Proposed Project. SDG&E would confirm that the water sources have adequate capacity prior to sourcing water from municipal water sources or water supply vendors for Alternative Route 4 or the Proposed Project. No new or relocated permanent sewer infrastructure would be required to accommodate sanitary waste produced during construction, and self-contained portable toilets would be used as with the Proposed Project. Storm water would be conveyed primarily through existing natural drainage patterns for Alternative Route 4 or the Proposed Project. As with the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area and would not require relocated, new, or expanded water, wastewater treatment, or stormwater drainage facilities. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to relocated, new, or expanded water, wastewater treatment, or stormwater drainage facilities. O&M of Alternative Route 4 or the Proposed Project would result in no impact to relocated, new, or expanded water, wastewater treatment, or stormwater drainage facilities.

Alternative Route 4 would construct a new 230 kV transmission line that is approximately 11.2 miles longer than the Proposed Project and would include optical ground wire for fiber optic communication. To provide temporary construction power and a backup power source for Alternative Route 4 or the Proposed Project, portable gas/diesel generators would be used. If a nearby existing overhead distribution system is available, it may be tapped to provide power for Alternative Route 4 or Proposed Project construction. As with the Proposed Project, SDG&E would contact Underground Service Alert prior to ground-disturbing work and would probe and expose existing utilities that may be in close proximity to Alternative Route 4. Construction methods would be adjusted as necessary to maintain that the integrity of existing utility lines is not compromised. O&M of Alternative Route 4, like the Proposed Project, would be conducted under SDG&E's existing O&M program that serves the area and would not require relocated, new, or expanded electrical, natural gas, and telecommunication facilities. Construction of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to relocated, new, or expanded electrical, natural gas, and telecommunication facilities. O&M of Alternative Route 4 or the Proposed Project would result in no impact to relocated, new, or expanded electrical, natural gas, and telecommunication facilities.

Alternative Route 4 would require a similar amount of water during construction as the Proposed Project, accounting for a small percentage of available water supply of the Sweetwater Authority and Padre Dam Municipal Water District. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area and would not require water beyond what is currently used at the existing Suncrest Substation.

Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to water supplies.

During construction of Alternative Route 4 or the Proposed Project, portable toilets would be provided for workers. O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area and may require portable toilets during certain maintenance activities. Sanitary waste would be disposed of at a properly licensed facility with adequate capacity. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to demand for wastewater treatment.

The solid waste generated by the construction of Alternative Route 4 would be similar to the amount of solid waste generated by construction of the Proposed Project. Solid waste generated by Alternative Route 4 or the Proposed Project would represent a small fraction of the total remaining capacity of the Sycamore Landfill. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area, and solid waste generated during O&M would be minimal and infrequent. Construction and O&M of Alternative Route 4 or the Proposed Project would result in a similar and less-than-significant impact to solid waste.

Consistent with the Proposed Project, SDG&E would comply with all federal, state, and local laws regarding solid waste. Construction and O&M of Alternative Route 4 or the Proposed Project would result in no impact to non-compliance with federal, state, or local statues and regulations related to solid waste.

6.4.2.2.20 Wildfire

As with the Proposed Project, Alternative Route 4 would not cross any interstates that could potentially be used as evacuation routes. Based on the acquisition of applicable encroachment permits and the implementation of traffic control measures, Alternative Route 4 would not conflict with emergency evacuation or response plans. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area, and routine maintenance would not result in a substantial increase in vehicle traffic or activities that could impair an emergency response plan or emergency evacuation plan. Construction of Alternative Route 4 or the Proposed Project would result in a less-than-significant impact to an emergency response plan or emergency evacuation plan. However, construction of Alternative Route 4 would result in a greater potential impact to lane closures as the route would be installed in an underground configuration along a longer length of roads compared to the Proposed Project. O&M of Alternative Route 4 or the Proposed Project would result in no impact to an emergency response plan or emergency evacuation plan.

Alternative Route 4 would cross very high Fire Hazard Severity Zones (FHSZs) for approximately 9.8 miles, which is approximately 1.7 fewer miles than the Proposed Project's crossing of very high FHSZs, and Alternative Route 4 would cross similar topography to that of the Proposed Project. However, the overhead portion of Alternative Route 4 would cross very high FHSZs for approximately 0.1 mile more compared to the Proposed Project's overhead segment. The risk posed to construction personnel would likely come from the inability to avoid or escape wildfire. Consistent with the Proposed Project, to prevent wildfires during construction, SDG&E would implement its Fire Prevention Plan, which includes training; drills;

procedures for fire response, reporting, and prevention; necessary fire prevention equipment; coordination with local and federal fire officials; and identification of daily site-specific risk conditions. During O&M, SDG&E's vegetation management programs would clear vegetation adjacent to transmission lines within CPUC HFTDs and would clear vegetation within a 10-foot radius of poles within areas of CAL FIRE jurisdiction. A majority of O&M activities for Alternative Route 4 or the Proposed Project would be conducted along existing paved roads where the risk of igniting vegetation is generally low. Construction and O&M of Alternative Route 4 or the Proposed Project would result in less-than-significant impact to exacerbating wildfire risks. However, construction of Alternative Route 4 may result in marginally less of an impact to wildfire risks compared to the Proposed Project as a shorter total length of the 230 kV transmission line would cross very high FHSZs. O&M of Alternative Route 4 may result in a marginal increase in impacts to wildfire risks compared to the Proposed Project as the overhead segment would cross very high FHSZs for a slightly longer length than the Proposed Project's overhead segment.

Alternative Route 4 would introduce a similar area of impervious surfaces as the Proposed Project this area would be confined to the poles that would be installed. Neither Alternative Route 4 nor the Proposed Project would increase existing flood risk levels as flood flows would flow around the poles. Further, SDG&E would implement a SWPPP for Alternative Route 4 or the Proposed Project that would include erosion-reducing measures and site stabilization. Like the Proposed Project, O&M of Alternative Route 4 would be conducted under SDG&E's existing O&M program that serves the area and would not change the slope of the area or affect existing drainages. Construction and O&M of Alternative Route 4 and the Proposed would result in a less-than-significant impact to downslope or downstream flooding or landslides.

6.4.2.3 Conclusion

Environmental resource criteria where Alternative Route 4 would result in a change in impacts to the criteria compared to the Proposed Project are summarized in Table 6-2: Summary of Alternative Route 4 Impacts Compared to the Proposed Project.

Alternative Route 4 would result in a relative increase in impacts to 21 resource criteria during construction and/or O&M and a relative decrease in impacts to one resource criteria during construction and/or O&M compared to the Proposed Project.

Table 6-2: Summary of Alternative Route 4 Impacts Compared to the Proposed Project

Environmental Resource Criteria	Increase or Decrease in Impact Compared to Proposed Project	Significance of Proposed Project Impact	Significance of Alternative Route 4 Impact
Scenic vistas	Increase	LTS	LTS
Existing visual character or quality of public views	Increase	LTS	LTS
Exposing sensitive receptors to substantial pollutant concentrations	Increase	LTS	LTS
Other emissions that would adversely affect a substantial number of people	Increase	LTS	LTS
Sensitive species and habitats	Increase	LTS After Mitigation	LTS After Mitigation
Riparian habitat or other sensitive natural communities	Increase	LTS After Mitigation	LTS After Mitigation
Movement of wildlife	Increase	LTS	LTS
Substantial collision or electrocution risk for birds or bats	Increase	LTS	LTS
Soil erosion or loss of topsoil	Increase	LTS	LTS
Emitting hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school	Increase	No Impact	LTS
Impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan	Increase	LTS After Mitigation	LTS After Mitigation
Exposing people or structures to a significant risk of loss, injury, or death from wildland fires	Increase	LTS	LTS
Water quality standards or waste discharge requirements	Increase	LTS	LTS
Risk of pollutants in a flood hazard, tsunami, or seiche zone	Increase	LTS	LTS
Ambient noise levels in excess of standards	Increase	LTS After Mitigation	LTS After Mitigation
Excessive ground-borne vibration or noise levels	Increase	LTS	Potentially Significant
Displacement of existing people or housing	Increase	LTS	LTS
Access to schools, parks, or other public facilities	Increase	LTS	LTS

Environmental Resource Criteria	Increase or Decrease in Impact Compared to Proposed Project	Significance of Proposed Project Impact	Significance of Alternative Route 4 Impact
The use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated	Increase	LTS	LTS
Inadequate emergency access	Increase	LTS After Mitigation	LTS After Mitigation
Wildfire risks	Decrease (Construction) Increase (O&M)	LTS	LTS

Note: All environmental resource criteria are from CEQA Appendix G criteria or discussed in the context of the CEQA Appendix G criteria in Chapter 3 – Environmental Impacts and Mitigation Measures and this chapter.

For ground-borne vibration or noise, Alternative Route 4 would result in an unavoidable potentially significant impact. As a result, Alternative Route 4 has similar, and only marginally greater, potential impacts for the majority of environmental resource criteria, but Alternative Route 4 introduces a potentially significant and unavoidable impact to ground-borne vibration compared to the Proposed Project.

6.4.3 Alternative Route 4B

6.4.3.1 Description

As depicted in Attachment 6-C: Project Route Alternatives, Alternative Route 4B would primarily follow the same roads and utility easements as the Alternative Route 4 alignment. Whereas Alternative Route 4 would be installed in an underground and overhead configuration, Alternative Route 4B would be installed entirely in an underground configuration between the connection with SDG&E's existing TL23021 and the east side of Rios Canyon Road. Alternative Route 4B would be installed underground for approximately 0.6 mile along Harbison Canyon Road whereas Alternative Route 4 would be installed in an overhead configuration. Approximately 0.1 mile northeast of the intersection of Galloway Valley Road and Harbison Canyon Road, Alternative Route 4B would deviate from Alternative Route 4, and Alternative Route 4B would continue on Harbison Canyon Road in an underground configuration for approximately 0.9 mile.

Alternative Route 4B would then turn southeast on South Grade Road and travel along South Grade Road in an underground configuration for approximately 1 mile before rejoining Alternative Route 4. Alternative Route 4B would follow the underground segment of Alternative Route 4 in an underground configuration until it reaches the intersection of Tavern Road and Dehesa Road, where Alternative Route 4B would switch to an overhead configuration and continue to follow Alternative Route 4 before connecting to the existing Suncrest Substation. Alternative Route 4B would cross land owned or managed by the CDFW, Endangered Habitats Conservancy, Sweetwater Authority, and USFS.

Alternative Route 4B was developed to improve routing aspects of Alternative Route 5, which is described in Section 6.4.4 Alternative Route 5. Alternative 4B was developed to avoid construction within the California Department of Transportation (Caltrans) ROW and to avoid impacts to businesses along the Olde Highway 80 corridor.

6.4.3.2 Discussion

Potential environmental impacts from construction and O&M of Alternative Route 4B were analyzed using the environmental resource criteria assessed for the Proposed Project. Potential impacts were compared to potential impacts from the Proposed Project. Due to Alternative Route 4B's geographic similarity to Alternative Route 4, the applicability of the analysis for Alternative Route 4 to the discussion of potential impacts from Alternative Route 4B is noted where relevant.

6.4.3.2.1 Aesthetics

The analysis in Section 6.4.2 Alternative Route 4 for impacts to scenic vistas applies to Alternative Route 4B. No additional impacts to scenic vistas would be introduced by Alternative

Route 4B compared to Alternative Route 4. In the community of Alpine near Harbison Canyon Road and South Grade Road, the residents in the vicinity of Alternative Route 4B would not have views of scenic vistas due to the topography that blocks views through open corridors, areas of dense vegetation and/or trees, and presence of other residences and/or other infrastructure within the views. As a result, the undergrounding of Alternative Route 4B in this area would not reduce impacts to residential views of scenic vistas. Construction and O&M of Alternative Route 4B or the Proposed Project would result in a less-than-significant impact to scenic vistas. However, construction and O&M of Alternative Route 4B may result in greater potential impacts to scenic vistas compared to the Proposed Project due to the longer crossing of Crestridge Ecological Reserve. Alternative Route 4B parallels existing distribution infrastructure in the Crestridge Ecological Reserve, but the structures installed along the route of Alternative Route 4B would likely be taller and wider than the existing utility infrastructure.

The analysis in Section 6.4.2 Alternative Route 4 for impacts to scenic resources within state scenic highways applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in no impact to scenic resources within a state scenic highway.

Alternative Route 4B would cross an area of similar visual character to the Proposed Project, consisting of undeveloped areas, residential areas, and existing road ROWs in the unincorporated portions of San Diego County. The analysis in Section 6.4.2 Alternative Route 4 for impacts to public views largely applies to Alternative Route 4B. Public viewers in residential areas may include motorists and pedestrians. Alternative Route 4B would be installed in an underground configuration along Harbison Canyon Road and South Grade Road, whereas Alternative Route 4 would be constructed in an overhead configuration in the vicinity of residences between Harbison Canyon Road and South Grade Road. However, public viewers in these residential areas are anticipated to be relatively low and thus any difference in impacts to public viewers in residential areas between Alternative Route 4 and Alternative Route 4B would be negligible. Construction and O&M of Alternative Route 4B or the Proposed Project would result in a less-than-significant impact to the existing visual character or quality of public views. However, construction and O&M of Alternative Route 4B may result in greater potential impacts to public views compared to the Proposed Project due to the longer crossing of Crestridge Ecological Reserve. Alternative Route 4B parallels existing distribution infrastructure in the Crestridge Ecological Reserve, but the structures installed along the route of Alternative Route 4B would likely be taller and wider than the existing utility infrastructure.

The analysis in Section 6.4.2 Alternative Route 4 for impacts to light or glare applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in a less than-significant-impact to light or glare.

6.4.3.2.2 Agriculture and Forestry Resources

The analysis in Section 6.4.2 Alternative Route 4 for impacts to agriculture and forestry resources applies to Alternative Route 4B. No additional impacts to agriculture or forestry resources would be introduced by Alternative Route 4B compared to Alternative Route 4. Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or similar and less-than-significant impacts to agricultural and forestry resources.

6.4.3.2.3 Air Quality

Alternative Route 4B would likely require the same equipment as the Proposed Project. Although the alignment of Alternative Route 4B would be approximately 22.1 miles longer in length compared to the Proposed Project, projected annual emissions are anticipated to be similar to those of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

The analysis in Section 6.4.2 Alternative Route 4 for conflicts or obstruction of implementation of an air quality plan applies to Alternative Route 4B. No additional impacts to air quality plans would be introduced by Alternative Route 4B compared to Alternative Route 4. Construction and O&M of Alternative Route 4B or the Proposed Project would result in no impact to creating a conflict with or obstructing implementation of an air quality plan.

The analysis in Section 6.4.2 Alternative Route 4 for CAPs for which the region is in non-attainment for applies to Alternative Route 4B. No additional impacts to CAPs designated as non-attainment would be introduced by Alternative Route 4B compared to Alternative Route 4. Construction and O&M of Alternative Route 4B or the Proposed Project would result in a similar and less-than-significant impact to a net increase in any CAP for which the Proposed Project region is non-attainment under an applicable air quality standard.

The analysis in Section 6.4.2 Alternative Route 4 for exposure of sensitive receptors to pollutants applies to Alternative Route 4B. Alternative Route 4B would exist in close proximity to a similar number of residential sensitive receptors compared to Alternative Route 4. Alternative Route 4B would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. Although construction of Alternative Route 4B or the Proposed Project would result in a less-than-significant impact to exposing sensitive receptors to substantial pollutant concentrations, construction of Alternative Route 4B may result in greater potential impacts to sensitive receptors compared to the Proposed Project because Alternative Route 4B would exist in close proximity to a greater number of residential sensitive receptors. O&M of Alternative Route 4B or the Proposed Project would result in no impact to exposing sensitive receptors to substantial pollutant concentrations

The analysis in Section 6.4.2 Alternative Route 4 for impacts to other emissions such as odors that would adversely affect a substantial number of people largely applies to Alternative Route 4B. However, Alternative Route 4B would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. Any odors during construction would be short-term and limited to the immediate vicinity of the activity. O&M activities are currently conducted in this area and would be limited in duration (i.e., typically lasting one day at each structure location) for Alternative Route 4B or the Proposed Project, and odor from fuel combustion would disperse quickly. Construction of Alternative Route 4B and the Proposed Project would result in a less-than-significant impact to other emissions such as odors that would adversely affect a substantial number of people. However, construction of Alternative Route 4B may result in greater potential impacts to sensitive receptors compared to construction of the Proposed Project because Alternative Route 4B would exist in close proximity to a greater number of residential sensitive receptors. O&M of Alternative Route 4B and the Proposed Project would result in no impact to other emissions such as odors that would adversely affect a substantial number of people.

6.4.3.2.4 Biological Resources

The analysis in Section 6.4.2 Alternative Route 4 for impacts to biological resources largely applies to Alternative Route 4B. Alternative Route 4B would cross Hermes copper butterfly critical habitat for approximately 4 miles and arroyo toad critical habitat for approximately 0.6 mile, representing the same crossing distance of arroyo toad critical habitat as Alternative Route 4 and only a marginally longer crossing distance of Hermes copper butterfly critical habitat compared to Alternative Route 4. The increased crossing length of the Crestridge Ecological Reserve for Alternative Route 4B would be negligible compared to the crossing length of Alternative Route 4. Alternative Route 4B's overhead segments would total to approximately 9.43 miles, which is shorter than the total length of the overhead segments of Alternative Route 4 (approximately 11.7 miles) and the Proposed Project's overhead segment (approximately 11 miles). A shorter overhead segment could result in fewer poles. Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or less-than-significant impacts to biological resources after mitigation. However, the increased crossing length of the Alternative Route 4B alignments through Crestridge Ecological Reserve and increased crossing length of Hermes copper butterfly critical habitat could marginally increase impacts to sensitive species or their habitats compared to the Proposed Project after mitigation. Construction and O&M of Alternative Route 4B could result in less of an impact to riparian habitat or other sensitive natural communities, movement of wildlife, and collision or electrocution risk for birds or bats compared to the Proposed Project due to requiring fewer poles and a shorter total length of overhead segments.

6.4.3.2.5 Cultural Resources

The analysis in Section 6.4.2 Alternative Route 4 for impacts to cultural resources largely applies to Alternative Route 4B. Preliminary desktop screening for cultural resources was conducted by SDG&E cultural resources staff utilizing records search data under contract from the SCIC. The records search revealed seven known cultural resources within the direct line of the Alternative Route 4B route. Four of these resources can likely be avoided with pole placement, and the other three resources are likely not avoidable without a route change. Although Alternative Route 4B is approximately 22.1 miles longer than the Proposed Project, both alignments present a risk of encountering undiscovered resources during construction. Further, the increased length of Alternative Route 4B is primarily located within previously disturbed residential areas and roads. Construction of Alternative Route 4B or the Proposed Project would result in less-than-significant impacts after mitigation to cultural resources and human remains. O&M of Alternative Route 4B or the Proposed Project would result in no impact to cultural resources and human remains.

6.4.3.2.6 Energy

The analysis in Section 6.4.2 Alternative Route 4 for impacts to energy applies to Alternative Route 4B. No additional impacts to energy would be introduced by Alternative Route 4B compared to Alternative Route 4. Although Alternative Route 4B is longer the Proposed Project, both alignments are likely to result in similar energy consumption due to the anticipated similar quantities of equipment, durations of equipment of operation, and integration into the existing O&M program in the area. Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or similar and less-than-significant impacts to energy.

6.4.3.2.7 Geology, Soils, and Paleontological Resources

Like the Proposed Project, Alternative Route 4B would cross potential liquefaction areas and areas mapped by the USGS as having landslide potential. Alternative Route 4B would cross soils classified as Hydrologic Group D (which is characterized by high clay content that could exhibit shrink-swell characteristics), as would the Proposed Project. Based on paleontological resources occurrence potential mapped for the Proposed Project, Alternative Route 4B is anticipated to also cross geologic units with low and very low potentials for paleontological resources to occur. The analysis in Section 6.4.2 Alternative Route 4 for impacts to geology and soils applies to Alternative Route 4B. Although Alternative Route 4B is longer than the Proposed Project, Alternative Route 4B would not introduce additional impacts to geology or paleontological resources compared to the Proposed Project due to the increased length primarily being in or along previously disturbed residential areas and roads. Less of an impact to the loss of topsoil could result from construction of Alternative Route 4B compared to the Proposed Project because Alternative Route 4B's overhead segments would total approximately 9.43 miles, which is shorter than the total length of the Proposed Project's overhead segment (approximately 11 miles). Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or similar and less-than-significant impacts to criteria pertaining to geology, soils, and paleontological resources. However, construction of Alternative Route 4B could result in less of an impact to topsoil loss compared to construction of the Proposed Project.

6.4.3.2.8 Greenhouse Gas Emissions

The analysis in Section 6.4.2 Alternative Route 4 for impacts to GHG emissions applies to Alternative Route 4B. Although Alternative Route 4B is longer than the Proposed Project, both are likely to result in similar GHG emissions due to the anticipated similar quantities of equipment, durations of equipment of operation, and integration into the existing O&M program in the area. Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or similar and less-than-significant impacts to GHG emissions.

6.4.3.2.9 Hazards, Hazardous Materials, and Public Safety

The analysis in Section 6.4.2 Alternative Route 4 for impacts to hazards, hazardous materials, and public safety largely applies to Alternative Route 4B. However, Alternative Route 4B would cross Harbison Canyon Road adjacent to Creekside Early Learning Center and Shadow Hills Elementary. Additionally, Alternative Route 4B would be installed in an underground configuration for approximately 3.6 miles longer than the underground segments of the Proposed Project,[2] which could result in a longer length of road closures compared to the Proposed Project. Like the Proposed Project, Alternative Route 4B would implement MM TRA-1, and emergency service providers would be provided notice before commencement of construction activities that would require lane closures. Although Alternative Route 4B would have a less-than-significant impact on emitting hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, Alternative Route 4B could result in a greater potential impact compared to the Proposed Project due to its proximity to existing schools. Construction and O&M of Alternative Route 4B or the Proposed Project would result in a less-

[2] The length of the Proposed Project's underground segments installed along public roads (La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive) would be approximately 2.5 miles.

than-significant impact after mitigation to an emergency response or emergency evacuation plan. However, construction and O&M of Alternative Route 4B could result in a greater potential impact to lane closures as the route would be installed in an underground configuration along a longer length of roads compared to the Proposed Project. O&M of Alternative Route 4B or the Proposed Project would result in no impact to an emergency response or emergency evacuation plan. Construction and O&M of Alternative Route 4B or the Proposed Project would have a less-than-significant impact on exposing people or structures to a significant risk of loss, injury, or death from wildland fires. However, construction and O&M of Alternative Route 4B could result in greater potential impacts to people and structures compared to construction and O&M of the Proposed Project because Alternative Route 4B would exist in close proximity to a greater number of residences compared to the Proposed Project. Additionally, construction and O&M of Alternative Route 4B could result in a greater potential impact to lane closures as the routes would be installed in an underground configuration along a longer length of roads compared to the Proposed Project.

6.4.3.2.10 Hydrology and Water Quality

The analysis in Section 6.4.2 Alternative Route 4 for impacts to hydrology and water quality applies to Alternative Route 4B. In addition to crossing the flood zones that Alternative Route 4 would cross, Alternative Route 4B would cross a FEMA Zone A flood zone adjacent to South Grade Road for less than 200 feet in an underground configuration. Any increase in impacts related to the release of pollutants compared to Alternative Route 4 within a flood zone would be negligible. The Proposed Project would span FEMA Flood Zone AE. Zone A corresponds to a 100-year flood zone and Zone AE corresponds to a 100-year flood zone where base flood elevations are known. Construction and O&M of Alternative Route 4B or the Proposed Project would result in less-than-significant or no impacts to hydrology and water quality. However, O&M of Alternative Route 4B could require increased dewatering of utility vaults compared to the Proposed Project due to the likely greater number of utility vaults along the longer underground alignment of Alternative Route 4B compared to the Proposed Project. Additionally, construction and O&M of Alternative Route 4B could result in greater potential impacts to risk of pollutants within a flood zone compared to the Proposed Project as a permanent structure may be placed within a flood zone.

6.4.3.2.11 Land Use and Planning

The analysis in Section 6.4.2 Alternative Route 4 for impacts to land use and planning applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in no impact to criteria pertaining to land use and planning.

6.4.3.2.12 Mineral Resources

Alternative Route 4B would cross an MRZ-3—which corresponds to areas containing known or inferred mineral occurrences of undetermined mineral resource significance—for approximately 9.9 miles, which is approximately 2.1 miles more compared to the Proposed Project. Like the Proposed Project, no active mines or designated extraction areas intersect Alternative Route 4B, and Alternative Route 4B would not cross any areas zoned for extractive mineral use. The analysis in Section 6.4.2 Alternative Route 4 for impacts to mineral resources applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in no impact to mineral resources.

6.4.3.2.13 Noise

The analysis in Section 6.4.2 Alternative Route 4 for impacts to noise applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in a less-than-significant impact to an increase in ambient noise levels in excess of standards after mitigation. Construction of Alternative Route 4B would result in a potentially significant impact to excessive ground-borne vibration or noise levels, and construction of the Proposed Project would result in a less-than-significant impact to excessive ground-borne vibration or noise levels. It is likely that the potentially significant impact to ground-borne vibration during construction of Alternative Route 4B could not be mitigated. O&M of Alternative Route 4B or the Proposed Project would result in no impact to excessive ground-borne vibration or ground-borne noise levels. Construction of Alternative Route 4B could result in a greater potential impact to residences and ground-borne vibration compared to construction of the Proposed Project because a greater number of residents would likely need to be provided compensation for relocation, and construction of Alternative Route 4B would result in a potentially significant impact to ground-borne vibration.

6.4.3.2.14 Population, Employment, and Housing

The analysis in Section 6.4.2 Alternative Route 4 for impacts to population, employment, and housing applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in no impact to inducing substantial unplanned population growth. Alternative Route 4B could require the relocation of residents in excess of potential relocations required for the Proposed Project due to Alternative 4B's proximity to residences. An estimated number of relocations has not been determined at this time. Construction and O&M of Alternative Route 4B and the Proposed Project would result in a less-than-significant impact to the substantial displacement of existing people or housing. However, construction and O&M of Alternative Route 4B could result in the displacement of a greater number of existing people or houses compared to construction and O&M of the Proposed Project.

6.4.3.2.15 Public Services

The analysis in Section 6.4.2 Alternative Route 4 for impacts to public services largely applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would either result in no impact or a less-than-significant impact to criteria pertaining to public services. However, Alternative Route 4B would travel along Harbison Canyon Road—which is used to access Creekside Early Learning Center, Shadow Hills Elementary, and Old Ironsides County Park—for a greater length compared to the Proposed Project. As a result, construction of Alternative Route 4B may result in greater delays in access to public facilities compared to the Proposed Project.

6.4.3.2.16 Recreation

The analysis in Section 6.4.2 Alternative Route 4 for impacts to recreation largely applies to Alternative Route 4B. Alternative Route 4B would cross the Loveland Reservoir Trail and the CRHT. In the Crestridge Ecological Reserve, Alternative Route 4B would cross the Flinn Springs Trail as well as a trail extending from the dirt portion of Rios Canyon Road. No additional impacts to recreation resources would be introduced by Alternative Route 4B compared to Alternative Route 4. Construction and O&M of Alternative Route 4B and the Proposed Project would either

result in no impact or a less-than-significant impact to criteria pertaining to recreation resources. However, construction and O&M of Alternative Route 4B could result in a greater number of temporary and partial trail closures compared to the Proposed Project.

6.4.3.2.17 Transportation

The analysis in Section 6.4.2 Alternative Route 4 for impacts to transportation applies to Alternative Route 4B. Although Alternative Route 4B is longer than Alternative Route 4 or the Proposed Project, all are likely to result in similar annual VMT. Alternative Route 4B would be installed in an underground configuration for approximately 3.6 miles longer than the underground segment of the Proposed Project,[3] which could result in a longer length of road closures compared to the Proposed Project. The required encroachment permits and traffic control plans would be implemented. Like the Proposed Project, Alternative Route 4B would implement MM TRA-1, and emergency service providers would be provided notice before commencement of construction activities that would require lane closures. Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or similar and less-than-significant impacts after mitigation to criteria pertaining to transportation. Construction and O&M of Alternative Route 4B would result in a greater potential impact to lane closures compared to the Proposed Project as the routes would be installed in an underground configuration along a longer length of roads compared to the Proposed Project.

6.4.3.2.18 Tribal Cultural Resources

The analysis in Section 6.4.2 Alternative Route 4 for impacts to tribal cultural resources largely applies to Alternative Route 4B. Although Alternative Route 4B is longer than Alternative Route 4 or the Proposed Project, all present a risk of encountering undiscovered tribal cultural resources during construction. Further, the increased length of Alternative Route 4B is primarily located with previously disturbed residential areas and roads. Construction and O&M of Alternative Route 4B or the Proposed Project would result in no impact to the substantial adverse change in the significance of tribal cultural resources.

6.4.3.2.19 Utilities and Service Systems

The analysis in Section 6.4.2 Alternative Route 4 for impacts to utilities and service systems applies to Alternative Route 4B. Construction and O&M of Alternative Route 4B or the Proposed Project would result in either no impact or similar and less-than-significant impacts to criteria pertaining to utilities and service systems.

6.4.3.2.20 Wildfire

Alternative Route 4B would cross very high FHSZs for approximately 10.8 miles, which is approximately 0.7 mile shorter than the Proposed Project. However, the overhead alignment of Alternative Route 4B would cross very high FHSZs for approximately 6.4 miles, which is approximately 1.6 miles shorter than the crossing of the overhead segment of the Proposed Project. Alternative Route 4B would implement the same measures and practices described in the analysis in Section 6.4.2 Alternative Route 4 for impacts to wildfire. Construction and O&M of

[3] The length of the Proposed Project's underground segments installed along public roads (La Cresta Road, Mountain View Road, Al Bahr Road, and Canyon Rim Drive) would be approximately 2.5 miles.

Alternative Route 4B or the Proposed Project would result in either no impact or less-than-significant impacts to criteria pertaining to wildfire. However, construction of Alternative Route 4B may result in marginally less potential impact to wildfire risks compared to construction of the Proposed Project due to the shorter crossing length of very high FHSZs compared to the Proposed Project. O&M of Alternative Route 4B may result in less of an impact to wildfire risks compared to the Proposed Project due to the shorter overhead crossing of very high FHSZs compared to the overhead segment of the Proposed Project.

6.4.3.3 Conclusion

Environmental resource criteria where Alternative Route 4B would result in a change in impacts to the criteria compared the Proposed Project are summarized in Table 6-3: Summary of Alternative Route 4B Impacts Compared to the Proposed Project.

Alternative Route 4B construction and/or O&M would result in a relative increase in impacts to 16 resource criteria and a relative decrease in the impacts to five resource criteria compared to the Proposed Project. For ground-borne vibration or noise, Alternative Route 4B would result in an unavoidable potentially significant impact. Compared to the Proposed Project, Alternative Route 4B has similar, and only marginally greater, potential impacts for the majority of environmental resource criteria, but Alternative Route 4B introduces a potentially significant and unavoidable impact to ground-borne vibration.

6.4.4 Alternative Route 5

6.4.4.1 Description

As depicted in Attachment 6-C: Project Route Alternatives, Alternative Route 5 would connect to SDG&E's existing TL23021, cross Interstate (I-) 8, and continue within or adjacent to an existing utility easement along U.S. Route 80 (Olde Highway 80) for approximately 3.9 miles in an underground configuration within or adjacent to an existing utility easement. Alternative Route 5 would travel southeast for approximately 2.5 miles along Alpine Boulevard, Arnold Way, and South Grade Road in an underground configuration primarily within or adjacent to an existing utility easement. Alternative Route 5 would then follow the Alternative Route 4 alignment in an underground configuration beginning near the intersection of South Grade Road and Rocrest Road. Approximately 0.1 mile south of Japatul Road, Alternative Route 5 would transition to an overhead configuration and continue to follow the Alternative Route 4 alignment primarily within or adjacent to an existing utility easement and connect to the existing Suncrest Substation. Alternative Route 5 would cross land owned or managed by Sweetwater Authority and the USFS. Alternative Route 5 was developed to follow existing roads and enable opportunities for undergrounding, resulting in deviations from Alternative Route 4.

6.4.4.2 Discussion

Potential environmental impacts from construction and O&M of Alternative Route 5 were analyzed using the environmental resource criteria assessed for the Proposed Project. Potential impacts were compared to potential impacts from the Proposed Project.

Table 6-3: Summary of Alternative Route 4B Impacts Compared to the Proposed Project

Environmental Resource Criteria	Increase or Decrease in Impact Compared to Proposed Project	Significance of Proposed Project Impact	Significance of Alternative Route 4B Impact
Scenic vistas	Increase	LTS	LTS
Existing visual character or quality of public views	Increase	LTS	LTS
Exposing sensitive receptors to substantial pollutant concentrations	Increase	LTS	LTS
Other emissions that would adversely affect a substantial number of people	Increase	LTS	LTS
Sensitive species and their habitat	Increase	LTS After Mitigation	LTS After Mitigation
Riparian habitat or other sensitive natural communities	Decrease	LTS After Mitigation	LTS After Mitigation
Movement of wildlife	Decrease	LTS	LTS
Collision or electrocution risk for birds or bats	Decrease	LTS	LTS
Soil erosion or loss of topsoil	Decrease	LTS	LTS
Emitting hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school	Increase	LTS	LTS
Impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan	Increase	LTS After Mitigation	LTS After Mitigation
Exposing people or structures to a significant risk of loss, injury, or death from wildland fires	Increase	LTS	LTS
Water quality standards or waste discharge requirements	Increase	LTS	LTS
Risk of pollutants in a flood hazard, tsunami, or seiche zone	Increase	LTS	LTS
Ambient noise levels in excess of standards	Increase	LTS After Mitigation	LTS After Mitigation
Excessive ground-borne vibration or noise levels	Increase	LTS	Potentially Significant
Displacement of existing people or housing	Increase	LTS	LTS

Environmental Resource Criteria	Increase or Decrease in Impact Compared to Proposed Project	Significance of Proposed Project Impact	Significance of Alternative Route 4B Impact
Access to schools, parks, or other public facilities	Increase	LTS	LTS
The use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated	Increase	LTS	LTS
Inadequate emergency access	Increase	LTS After Mitigation	LTS After Mitigation
Wildfire risks	Decrease	LTS	LTS

Note: All environmental resource criteria are from CEQA Appendix G criteria or discussed in the context of the CEQA Appendix G criteria in Chapter 3 – Environmental Impacts and Mitigation Measures and this chapter.

6.4.4.2.1 Aesthetics

Scenic vistas in the area of Alternative Route 5 include foothills, mountains, and canyons. Primary viewer groups in the area are residents, motorists, and recreationists. From I-8 to approximately 0.1 mile south of the intersection of Japatul Road and Sequan Truck Trail, Alternative Route 5 would be installed in an underground configuration. Residents in the community of Alpine located north of Tavern Road and Japatul Road with south-facing views would have open views of canyons and mountains. Similarly, a few residents located west of Arnold Way have relatively open views of mountains. Construction during undergrounding of Alternative Route 5 may be visible to these residents north of Tavern Road and Japatul Road, but construction would likely only be visible to an estimated five or fewer homes. Most homes at these locations would be located at a higher elevation than Tavern Road and Japatul Road, which would not place construction activities on the road within a residential viewer's direct line of sight from their home. Construction of Alternative Route 5 along Arnold Way would similarly not be in the direct line of sight for residents of homes at a higher elevation than Arnold Way. Homes at elevations similar to the elevation of Arnold Way would have existing utility infrastructure, other homes, and/or trees partially obscuring the mountain views, and construction would only have a temporary effect on further impacts to scenic vistas for these residential viewers. Once constructed, Alternative Route 5 would not be visible in these areas as it would be underground. Motorist views of Alternative Route 5 during construction and O&M would be brief. Recreationists in the Loveland Reservoir area would have views of scenic vistas and temporary views of construction of Alternative Route 5. Once constructed, Alternative Route 5 would not substantially adversely impact recreationist views in the Loveland Reservoir area as Alternative Route 5 would parallel exiting transmission infrastructure. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to scenic vistas.

Alternative Route 5 would cross I-8 in an underground configuration at one location, and Alternative Route 5 would be constructed in an underground configuration at the location of two I-8 underpasses. I-8 is eligible for designation as a state scenic highway. The County of San Diego's 2007 guidelines for determining significance for visual resources impacts describes that a project would generally be considered to have a significant effect if it would substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from a scenic highway. During construction, visual impacts would include the temporary presence of workers, construction equipment, and vehicles associated with the installation of the underground transmission line. Trees are located in the vicinity of I-8, but no other scenic resources are adjacent to I-8 where Alternative Route 5 would cross I-8. Vegetation removal, including tree removal and trimming, would be limited to the minimum necessary for construction of Alternative Route 5. Once constructed, Alternative Route 5 would not result in long-term impacts within a state scenic highway due to the underground configuration. Construction and O&M of Alternative Route 5 would not substantially obstruct, interrupt, or detract from views from I-8 and would have a less-than-significant impact to scenic resources within a state scenic highway. However, Alternative Route 5 would result in greater potential impacts to scenic resources within a highway eligible for designation as a state scenic highway during construction compared to the Proposed Project, which would not be located within a state scenic highway or a highway eligible for designation as a state scenic highway.

Alternative Route 5 would cross an area of similar visual character to the Proposed Project, consisting of undeveloped areas, residential areas, and existing road ROWs in the unincorporated portions of San Diego County. Primary viewer groups within the area include residents, motorists, and recreationists.

Undergrounding of Alternative 5 would occur in close proximity to numerous residents in the community of Alpine. Motorists and pedestrians, who are anticipated to be primarily residents of the neighborhoods, could view construction. The construction equipment, activities, and workers would stand in contrast to the residential character of the neighborhood and degrade the visual character and quality of the public views in residential areas for the duration of construction. Construction of Alternative Route 5 would result in a potentially significant impact to the visual character or quality of public views as numerous motorist and pedestrian viewers in the community of Alpine would be impacted. Alternative Route 5 would require implementation of mitigation measures, such as screening of work sites, to reduce the impact to the visual character or quality of the public views in the residential area to be less than significant during construction. Once constructed, Alternative 5 would not be visible where it is undergrounded. Like the Proposed Project, routine maintenance of the overhead and underground segments is expected to require approximately one trip per year by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and/or an assist truck. O&M activities would result in brief and infrequent impacts to the residential character of the neighborhoods.

Construction of Alternative Route 5 may be visible from portions of Flinn Spring Park. Once constructed, recreationists would not be able to view Alternative Route 5 from Flinn Springs Park due to the underground configuration. The existing visual character and quality of the view looking north of the park is characterized by existing transmission infrastructure, roads, and buildings so the annual maintenance trip activities would not substantially degrade the visual character or quality of the area. Recreationists in the Loveland Reservoir area would have temporary views of construction of an overhead segment of Alternative Route 5. Once constructed, Alternative Route 5 would not substantially degrade the existing visual character or quality of the recreationist views in the Loveland Reservoir area as Alternative Route 5 would parallel exiting transmission infrastructure.

Motorist views from I-8 would be brief during construction of Alternative Route 5. Once constructed, Alternative Route 5 would not substantially adversely impact the visual character or quality of the public views due to its underground configuration. Motorist views of annual maintenance trips would be brief and only of small crews and few trucks performing maintenance activities. Along Japatul Road, the overhead segment of Alternative Route 5 would parallel existing transmission infrastructure and would not substantially degrade the visual character or quality of motorist views.

Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to the visual character or quality of public views after mitigation. However, construction of Alternative Route 5 could result in greater potential impacts to views in residential aeras compared to construction of the Proposed Project as Alternative Route 5 would exist in close proximity to a greater number of residences compared to the Proposed Project.

Like the Proposed Project, glare from construction equipment would be transient and ephemeral. Night work for Alternative Route 5 or the Proposed Project is not anticipated to be necessary but could be required in limited circumstances. For construction activities conducted at night, portable temporary lighting would be required. Like the Proposed Project, implementation of APM AES-04 would reduce light escape by directing lighting at the individual work areas, and non-specular conductors would be installed to reduce reflectivity in accordance with APM AES-03. In addition, and consistent with the Proposed Project, the color of the TSPs would be weathered steel, which would reduce potential glare. Aeronautical obstruction lighting is not anticipated to be implemented for Alternative Route 5 or the Proposed Project as no structures would exceed 200 feet above ground level, and Alternative Route 5 would not be a new source of light. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to light or glare.

6.4.4.2.2 Agriculture

Alternative Route 5 would not be located on or convert Prime Farmland or Farmland of Statewide Importance to non-agriculture use. However, unlike the Proposed Project, Alternative Route 5 would cross Unique Farmland for less than 0.1 mile. If a pole is required on the Unique Farmland, the permanent impact would be up to 11 square feet per pole. As a result, construction and O&M of Alternative Route 5 would result in a less-than-significant impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Construction and O&M of Alternative Route 5 would have a greater potential impact to Unique Farmland compared to construction and O&M of the Proposed Project, which would result in no impact to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

Like the Proposed Project, Alternative Route 5 would cross County agricultural zoning districts A70 and A72. However, Alternative Route 5 or the Proposed Project would not conflict with the A70 and A72 zones, as these designations allow Minor Impact Utilities with issuance of a Minor Use Permit and Major Impact Services and Utilities with a Major Use Permit. Neither Alternative Route 5 nor the Proposed Project would cross lands under Williamson Act contract. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to creating a conflict with existing zoning or Willaimson Act contracts.

Alternative Route 5 would cross CNF land for approximately the same distance as the Proposed Project. Alternative Route 5 would not conflict with the existing zoning or cause rezoning of forest land. Within the CNF, Alternative Route 5 or the Proposed Project would traverse lands designated as Developed Areas Interface and Back Country Motorized Use Restricted, and major utility corridors are considered suitable uses within certain areas of these designations. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to creating a conflict with zoning or causing rezoning of forest land.

Consistent with the Proposed Project, vegetation removal would be limited to the minimum necessary for construction and O&M of Alternative Route 5. Vegetation removal within forest land would be restored in accordance with a Habitat Restoration and Revegetation Plan for Alternative Route 5 or the Proposed Project. No impacts are anticipated to native forest or woodland vegetation within the CNF as with the Proposed Project. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the loss of forest land or conversion of forest land to non-forest use.

Neither Alternative Route 5 nor the Proposed Project would construct access routes, structures, or other improvements in proximity to Important Farmland or forest land that could facilitate incompatible development. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

6.4.4.2.3 Air Quality

Alternative Route 5 would likely require the same equipment as the Proposed Project. Although the alignment of Alternative Route 5 would be approximately 1.9 miles longer than the Proposed Project, projected annual emissions are anticipated to be similar to those of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

The SDAPCD is the agency responsible for managing local air quality, administering California and federal air pollution control programs, and ensuring attainment and maintenance of the ambient air quality standards. Annual emissions associated with Alternative Route 5 or Proposed Project construction would be temporary and would represent a small fraction of the regional emission inventories included in the applicable air quality plans. Consistent with the Proposed Project, construction of Alternative Route 5 would be performed in compliance with applicable air district rules and regulations, ensuring that activities would be consistent with air district efforts to achieve attainment and maintenance of the standards. The Alternative Route 5-related or Proposed Project-related annual emissions occurring in compliance with these rules and regulations would not conflict with or obstruct implementation of applicable air quality plans. Like the Proposed Project, O&M of Alternative Route 5 would be incorporated into SDG&E's existing O&M program, with only one maintenance trip per year anticipated for Alternative Route 5 or the Proposed Project. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to creating a conflict with or obstructing implementation of an air quality plan.

Alternative Route 5 would have similar emissions as the Proposed Project during construction due to the likely similar quantities of equipment and durations of equipment operation. As a result, it is anticipated that uncontrolled construction emissions from Alternative Route 5 would also likely exceed applicable thresholds for PM_{10} and all other emissions would be below applicable thresholds. To reduce these construction emissions, compliance with applicable air district rules and regulations would occur for Alternative Route 5 or the Proposed Project. With adherence to state and federal regulations, controlled construction emissions from Alternative Route 5 or the Proposed Project would likely not exceed the significance thresholds for any CAPs. Consistent with the Proposed Project, O&M emissions from Alternative Route 5 would not exceed any thresholds due to minimal ground disturbance and a nominal increase in vehicle use for maintenance and inspection trips. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to a net increase in any CAP for which the Proposed Project region is non-attainment under an applicable air quality standard.

Alternative Route 5 would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. Like the Proposed Project, Alternative Route 5 would adhere to applicable air district rules and regulations to reduce fugitive dust emissions during construction. Routine O&M activities for Alternative Route 5 or the Proposed Project

would require one trip per year by crews of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and/or an/or assist truck. O&M activities are anticipated to be limited in duration, resulting in limited emission in the vicinity of sensitive receptors. Construction of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to exposing sensitive receptors to substantial pollutant concentrations. However, construction of Alternative Route 5 may result in greater potential impacts to sensitive receptors compared to construction and O&M of the Proposed Project because Alternative Route 5 would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would result in no impact to exposing sensitive receptors to substantial pollutant concentrations.

Like the Proposed Project, construction of Alternative Route 5 would generate odor from operation of diesel-powered construction equipment and vehicles. Such odors would be short-term and limited to the immediate vicinity of the activity. O&M activities are currently conducted in this area and would be limited in duration (i.e., typically lasting one day at each structure location) for Alternative Route 5 or the Proposed Project, and odor from fuel combustion during O&M activities for Alternative Route 5 or the Proposed Project would disperse quickly. As a result, construction of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to other emissions (such as odors) that would adversely affect a substantial number of people. However, construction of Alternative Route 5 could result in greater potential impacts to sensitive receptors compared to construction of the Proposed Project because Alternative Route 5 would exist in close proximity to a greater number of residential sensitive receptors compared to the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would result in no impact to other emissions (such as odors) that would adversely affect a substantial number of people.

6.4.4.2.4 Biological Resources

Alternative Route 5 would cross and/or be located within 0.25 mile of CNDDB records for arroyo toad, coastal California gnatcatcher, least Bell's vireo, San Diego thorn-mint, and western spadefoot (CDFW 2024). Like the Proposed Project, construction of Alternative Route 5 could affect special-status plant and wildlife species. The route of Alternative Route 5 is longer than the Proposed Project, but Alternative Route 5 would traverse residential areas and commercial areas for a greater length; sensitive species and habitat are less likely to be encountered in these areas due to their previously disturbed nature.

Alternative Route 5 would cross arroyo toad critical habitat for approximately 0.6 mile and Hermes copper butterfly critical habitat for approximately 3.2 miles. In comparison, the Proposed Project would cross arroyo toad critical habitat for approximately 0.8 mile and Hermes copper butterfly critical habitat for approximately 3.1 miles. Consistent with the Proposed Project, impacts to sensitive species and habitats during construction would be temporary and intermittent in nature (lasting only as long as construction work at a given site) and would be limited in their potential geographic scope. Like the Proposed Project, impacts would be reduced with the implementation of MMs and APMs. Alternative Route 5 or Proposed Project O&M activities may result in direct crushing of or potential vehicle or equipment strikes to individual special-status wildlife that may result in injury or mortality of individuals. Tree trimming and brush and weed control during O&M of Alternative Route 5 or the Proposed Project may result

in bird nest and bat roost disruption or destruction. For this reason, vegetation management would be scheduled outside of the nesting bird season to the greatest extent feasible and vegetation removal would be limited to the minimum necessary to complete operations. The shorter combined length of the overhead segments of Alternative Route 5 (approximately 6.5 miles) compared to the length of the overhead segment of the Proposed Project (approximately 11 miles) could result in less vegetation trimming and removal during O&M of Alternative Route 5. Given the periodic but infrequent nature of these continuing operations, impacts would be less than significant. Construction and O&M of Alternative Route 5 and the Proposed Project would result in a less-than-significant impact to sensitive species or their habitats with the implementation of mitigation. However, the increased crossing length of the Alternative Route 5 alignment through Hermes copper butterfly critical habitat could result in marginally increased impacts to sensitive species or their habitats during construction compared to the Proposed Project. The shorter combined length of the overhead segments of Alternative Route 5 compared to the length of the overhead segment of the Proposed Project could result in less of an impact to sensitive species or wildlife due to less tree trimming and vegetation removal needs during O&M of Alternative Route 5.

Construction of Alternative Route 5 could impact riparian habitat or other sensitive natural communities. The overall length of Alternative Route 5 is longer than the Proposed Project, but Alternative Route 5 would traverse residential areas and commercial areas for a greater length, where riparian habitat or other sensitive natural communities are less likely to be encountered due to the previously disturbed nature of these areas, and the majority of Alternative Route 5 would be undergrounded. Alternative Route 5's overhead segment would be approximately 4.5 miles shorter in length compared to the Proposed Project's overhead segment and require fewer poles compared to the Proposed Project, resulting in less permanent impacts compared to the Proposed Project. Consistent with the Proposed Project, Alternative Route 5 would implement MMs and APMs to verify minimization of impacts to riparian habitat and other sensitive natural communities. Pre-construction biological surveys would be conducted and boundaries of areas supporting native vegetation and sensitive natural communities would be flagged for avoidance. A WEAP training would be provided to confirm contractor understanding and implementation of protective measures. In addition, mitigation strategies (such as special-status plant species restoration) would be implemented. During O&M of Alternative Route 5 or the Proposed Project, vegetation removal would be limited to the minimum necessary to complete operations. The overhead segment of Alternative Route 5 would be approximately 4.5 miles shorter than the overhead segment of the Proposed Project, which could result in less vegetation trimming and removal during O&M of Alternative Route 5 compared to the Proposed Project. Given the periodic but infrequent nature of these continuing operations, impacts would be less than significant for construction of Alternative Route 5 or the Proposed Project. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to riparian habitat or other sensitive natural communities after mitigation. However, the shorter overhead segment of Alternative Route 5 compared to the Proposed Project could result in less of an impact to riparian areas or sensitive natural communities during construction and O&M of Alternative Route 5 compared to the Proposed Project.

Should any construction or O&M activities be required within jurisdictional waters, necessary permits and authorizations would be obtained prior to conducting Alternative Route 5 or Proposed Project activities in jurisdictional waters, potentially including a Section 404

Nationwide Permit from the USACE, a Water Quality Certification and/or Waste Discharge Requirement from the RWQCB, and/or a Section 1602 LSAA from the CDFW. Further, Alternative Route 5 or the Proposed Project would mitigate for any impacts to wetlands. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to federally or state-protected wetlands after mitigation.

No wildlife nursery sites were identified within the Proposed Project Area, which partially overlaps with Alternative Route 5. Nursery sites are not anticipated to occur within the Alternative Route 5 areas due to its areas of similarity to the Proposed Project Area and areas of residential and commercial development. Construction and O&M of Alternative Route 5 or the Proposed Project would temporarily affect only small, geographically dispersed areas at any one time, resulting in temporarily altered movement paths for individual wildlife, and would not create substantial barriers to movement. Once constructed, the poles would occupy small (i.e., pole base size of up to six feet in diameter), geographically dispersed areas around which terrestrial wildlife could move. However, new poles and lines could result in a risk of collisions for birds and interfere with the movement of individuals or flocks. Compared to the Proposed Project, Alternative Route 5 would be installed in an underground configuration for a longer distance and construct an overhead segment that would be approximately 4.5 miles shorter than the Proposed Project, which would result in fewer new poles and a shorter distance of overhead lines. To avoid impacts to avian movement from new structures, new and replacement structures and conductor for Alternative Route 5 or the Proposed Project would be designed to follow the intent of Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006, 2012), reducing potential impacts to avian movement to a less-than-significant level. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to the movement of wildlife. However, the shorter length of the overhead segment of Alternative Route 5 compared to the Proposed Project could result in less of an impact to the movement of wildlife compared to the Proposed Project.

Alternative Route 5 or the Proposed Project would be designed in a way that complies with local policies pertaining to wildlife and plants. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to a conflict with any local policies or ordinances protecting biological resources.

Alternative Route 5 would cross several of the HCPs; NCCPs; or other approved local, regional, or state HCPs analyzed for the Proposed Project. The following plan areas would be crossed by Alternative Route 5:

- San Diego MSCP,
- San Diego MSCP South San Diego County Subarea,
- San Diego County Water Authority NCCP/HCP, and
- SDG&E Subregional NCCP/HCP, and
- SDG&E HCP Amendment.

Like the Proposed Project, Alternative Route 5 would implement MMs and APMs to reduce impacts to sensitive species and habitats. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to a conflict with the

provisions of an adopted HCP; NCCP; or other approved local, regional, or state HCP after mitigation.

The potential for new collision and electrocution risk from Alternative Route 5 or the Proposed Project would be limited to the overhead portion of the 230 kV transmission line. Compared to the Proposed Project, the overhead segment of Alternative Route 5 would be approximately 4.5 miles shorter than the overhead segment of the Proposed Project. Alternative Route 5 or the Proposed Project would be designed to follow the intent of Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (APLIC 2006, 2012), reducing potential impacts to collision or electrocution risk for avian or bat species. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to a substantial collision or electrocution risk for birds or bats. However, the shorter length of the overhead segment of Alternative Route 5 compared to the Proposed Project could result in less of an impact to a substantial collision or electrocution risk for birds or bats compared to the Proposed Project.

6.4.4.2.5 Cultural Resources

Portions of the Alternative Route 5 alignment were covered by the pedestrian survey of the Proposed Project's proposed study area. However, the majority of the Alternative Route 5 alignment was not covered by pedestrian survey efforts. Like the Proposed Project, Alternative Route 5 would avoid known historical resources and archaeological resources by spanning known resources to the extent possible. Preliminary desktop screening for cultural resources was conducted by SDG&E cultural resources staff utilizing records search data under contract from the SCIC. The records search revealed seven known cultural resources within the direct line of Alternative Route 5. Four of these resources can likely be avoided with pole placement, and the other three resources are likely not avoidable without a route change. Where full avoidance is determined to be infeasible, the historic or archaeological resources would be fully evaluated for CRHR eligibility. Alternative Route 5 would implement the same measure for unanticipated archaeological resource discoveries as the Proposed Project. In accordance with APM CUL-06, work would be halted in the immediate area to allow evaluation of the archaeological resource. For significant cultural resources that cannot be avoided, data recovery would be implemented under an approved SDG&E-prepared Data Recovery Plan. Although Alternative Route 5 is longer than the Proposed Project, both alignments present a risk of encountering undiscovered resources during construction. Further, the increased length of the Alternative Route 5 alignment by approximately 1.9 miles compared to the Proposed Project would be unlikely to contribute to a greater likelihood of encountering undiscovered resources as Alternative Route 5 traverses previously disturbed residential areas, commercial areas, and existing roads for the majority of the route. O&M of Alternative Route 5 or the Proposed Project would be incorporated into SDG&E's existing O&M program and would not involve substantial ground disturbance as would be the case for the Proposed Project. Construction of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact after mitigation to the substantial adverse change in the significance of a historical or archaeological resource. O&M of Alternative Route 5 or the Proposed Project would result in no impact to the substantial adverse change in the significance of a historical or archaeological resource.

Like the Proposed Project, if human remains are inadvertently discovered during construction activities, all work would halt within a 50-foot radius of the remains discovered on Alternative Route 5. SDG&E would follow all applicable regulations and contact the County coroner. If the remains are determined to be Native American or other Native American cultural items are uncovered on federal land, the remains and/or cultural items would be treated in accordance with NAGPRA. Work would remain suspended in the area of the discovery until treatment options are identified. Although Alternative Route 5 is longer than the Proposed Project, both alignments present a risk of encountering human remains during construction. Further, the increased length of the Alternative Route 5 alignment by approximately 1.9 miles compared to the Proposed Project would be unlikely to contribute to a greater likelihood of encountering undiscovered human remains as Alternative Route 5 traverses previously disturbed residential areas, commercial areas, and existing roads for the majority of the route. O&M of Alternative Route 5 or the Proposed Project would be incorporated into SDG&E's existing O&M program and would not involve substantial ground disturbance as would be the case for the Proposed Project. Construction of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to the disturbance of any human remains. O&M of Alternative Route 5 or the Proposed Project would result in no impact to the disturbance of any human remains.

6.4.4.2.6 Energy

Alternative Route 5 would likely require the same equipment as the Proposed Project. Although the alignment of Alternative Route 5 would be approximately 1.9 miles longer than the Proposed Project, projected fuel consumption is anticipated to be similar to that of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

Consistent with the Proposed Project, Alternative Route 5 would require the short-term consumption of fossil fuel resources to power equipment, helicopters, and vehicles used during construction. Construction of Alternative Route 5 or the Proposed Project would utilize electrical energy from the existing distribution system or a generator to temporarily power construction trailers, lighting, and other equipment. Alternative Route 5 construction activities would likely constitute a similar percent of total diesel and gasoline consumption in the entirety of San Diego County as the Proposed Project, which would represent less than 0.02 percent of annual fuel use for each of the following fuel categories in California: gasoline, diesel, and jet fuel. O&M of Alternative Route 5 would be incorporated into SDG&E's existing O&M program and require one annual maintenance trip by crews composed of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and/or an assist truck. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the consumption of energy.

Like the Proposed Project, Alternative Route 5 would not conflict with the long-term goals of the state Renewable Portfolio Standards Program or state or local renewable energy or energy efficiency plans. Alternative Route 5 or the Proposed Project would represent a short-term increase in use of fuel during construction and minor amounts of electricity and fuel resources consumed during O&M. Consistent with the Proposed Project, Alternative Route 5 would not prevent renewable energy sources from being used or create significant use of energy resources that could conflict or obstruct state or local renewable energy or energy efficiency plans.

Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to a state or local plan for renewable energy or energy efficiency.

6.4.4.2.7 Geology, Soils, and Paleontological Resources

As with the Proposed Project, Alternative Route 5 would not cross any active or potentially active faults, but Alternative Route 5 would be located within 10 miles of potentially active faults and thus susceptible to earthquake forces and seismic shaking. Like the Proposed Project, Alternative Route 5 would cross potential liquefaction areas and areas mapped by USGS as having landslide potential. Consistent with the Proposed Project, Alternative Route 5 would be designed to be consistent with CPUC GO 95, the CBC, and the geotechnical engineering report prepared in accordance with APM GEO-01. Alternative Route 5 would incorporate standard engineering practices and recommendations from the geotechnical engineering report to reduce seismic-related risks to the structures. Neither Alternative Route 5 nor Proposed Project O&M activities would involve substantial ground disturbance or installation of new features that would expose people or structures to seismic hazards. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact from the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, or landslides. O&M of Alternative Route 5 or the Proposed Project would result in no impact from the rupture of a known earthquake fault, strong seismic ground shaking, seismic related-ground failure, liquefaction, or landslides.

Areas temporarily impacted by construction could result in the loss of topsoil if topsoil is present in work areas. Similarly, areas permanently impacted by construction would result in the loss of topsoil if topsoil exists in permanent impact areas. Alternative Route 5 could result in less topsoil loss compared to the Proposed Project as the overhead segment would be approximately 4.5 miles shorter compared to the overhead segment of the Proposed Project, resulting in the installation of fewer poles. For Alternative Route 5 or the Proposed Project, SDG&E would develop and implement a SWPPP and adhere to SDG&E's Water Quality Construction BMPs Manual to minimize erosion. The SWPPP and associated BMPs would be implemented to minimize soil erosion during construction of Alternative Route 5 or the Proposed Project and to reduce impacts to a less-than-significant level. Consistent with the Proposed Project, Alternative Route 5 O&M activities would not involve substantial ground disturbance. Construction of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to soil erosion or the loss of topsoil. However, construction of Alternative Route 5 could result in less of an impact to the loss of topsoil compared to the Proposed Project because Alternative Route 5 would install fewer poles than the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would result in a no impact to soil erosion or the loss of topsoil.

As previously described, like the Proposed Project, Alternative Route 5 would cross potential liquefaction areas and areas mapped by USGS as having landslide potential. Alternative Route 5 or the Proposed Project would be designed to be consistent with CPUC GO 95, the CBC, and the geotechnical engineering report prepared in accordance with APM GEO-01, which will include avoiding the installation of Alternative Route 5 or Proposed Project structures on unstable soils. Like the Proposed Project, imported fill and/or topsoil would be used to backfill trenches associated with Alternative Route 5, which would stabilize the existing geologic conditions and reduce the potential for movement resulting from unstable geologic units. As with the Proposed

Project, O&M activities for Alternative Route 5 would not involve substantial ground disturbance. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact from the risk of landslides, lateral spreading, subsidence, liquefaction, and collapse. O&M of Alternative Route 5 or the Proposed Project would result in no impact from the risk of landslides, lateral spreading, subsidence, liquefaction, and collapse.

Like the Proposed Project, Alternative Route 5 would cross soils classified as Hydrologic Group D, which is characterized by high clay content that could exhibit shrink-swell characteristics. In accordance with APM GEO-01, recommendations from the geotechnical engineering report (such as increasing pole depth) would be incorporated into the design if expansive soils are identified where the poles would be located for Alternative Route 5 or the Proposed Project. Therefore, the structures are anticipated to be buried below expansive soils, as defined in the 1994 Uniform Building Code. Like the Proposed Project, underground segments of Alternative Route 5 would be encased in a concrete duct bank and not susceptible to potentially expansive soils. Consistent with the Proposed Project, Alternative Route 5 O&M activities would not involve substantial ground disturbance or installation of new structures. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to posing substantial risks to life or property.

Like the Proposed Project, construction and O&M of Alternative Route 5 would not involve use of a septic tank or alternative wastewater disposal system. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to soils that may not be able to adequately support septic tanks or alternative wastewater disposal systems.

Based on paleontological resources occurrence potential mapped for the Proposed Project, Alternative Route 5 is anticipated to also cross geologic units with low and very low potential for paleontological resources to occur. Construction of Alternative Route 5 would be unlikely to damage a unique paleontological resource or site or unique geologic feature due to the likely low and very low potentials for paleontological resources to occur in the underlying geologic units. Neither Alternative Route 5 nor Proposed Project O&M activities would involve substantial ground disturbance. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to destroying a unique paleontological resource or site or unique geological feature.

6.4.4.2.8 Greenhouse Gas Emissions

Alternative Route 5 would likely require the same equipment as the Proposed Project. Although the alignment of Alternative Route 5 would be approximately 1.9 miles longer than the Proposed Project, projected GHG emissions are anticipated to be similar to that of the Proposed Project due to the likely similar quantities of equipment and durations of equipment operation.

When amortized over an assumed 20-year life, the Proposed Project's construction CO_2e emissions are reduced to approximately 722.1 $MTCO_2e$, which is well below the threshold of 900 $MTCO_2e$. Annual total CO_2e emissions during O&M of the Proposed Project would be well below the County's threshold of 900 $MTCO_2e$. Alternative Route 5 would likely have similar emissions as the Proposed Project during construction and O&M due to the likely similar quantities of equipment and durations of equipment operation. Construction and O&M of Alternative Route 5 and the Proposed Protect would result in a similar and less-than-significant

impact to the generation of GHG emissions that may have a significant impact on the environment.

As with the Proposed Project, Alternative Route 5 would improve reliability of the area's power system, which may then support additional electrification of customer operations, thereby reducing GHG emissions. Like the Proposed Project, O&M of Alternative Route 5 would require approximately one vehicle trip per year for regular O&M activities and would not involve a significant use of fossil fuels, resulting in negligible GHG emissions. Construction and O&M of Alternative Route 5 or the Proposed Project would not conflict with an applicable plan, policy, or regulation for reducing GHG emissions.

6.4.4.2.9 Hazards and Hazardous Materials

Alternative Route 5 would require the same types and limited quantities of hazardous materials and procedures to prevent and clean up spills as would be required for the Proposed Project. Consistent with the Proposed Project, refueling of equipment and vehicles would typically take place at staging yards. Fuels and hazardous materials kept at these locations would be stored within secondary containment to minimize potential releases. In addition, SDG&E construction crews would keep spill kits on site for use in the event of a spill, in accordance with SDG&E's Water Quality Construction BMPs Manual. Consistent with the Proposed Project, SDG&E would comply with all such laws, rules, and regulations governing the proper handling and disposal of hazardous materials. Materials used during O&M of Alternative Route 5 or the Proposed Project would be applied, stored, and disposed of by licensed professionals and in accordance with applicable regulations and manufacturer recommendations. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to creating a risk to the public or environment from the routine use, transport, storage, and disposal of hazardous materials.

As with the Proposed Project, SDG&E would implement its Water Quality Construction BMPs Manual and maintain spill kits on site to minimize the potential for spills and respond to potential releases of hazardous materials during construction of Alternative Route 5. Like the Proposed Project, SDG&E would maintain spill kits in maintenance vehicles during O&M of Alternative Route 5. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to creating a risk to human health or environment from reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

Unlike the Proposed Project, Alternative Route 5 would be located within 0.25 mile of Boulder Oaks Elementary and Los Coches Creek Middle School. Alternative Route 5 would require the same types and limited quantities of hazardous materials and procedures to prevent and clean up spills as would be required for the Proposed Project. Refueling of equipment and vehicles would typically take place at staging yards. Fuels and hazardous materials kept at these locations would be stored within secondary containment to minimize potential releases. In addition, SDG&E construction crews would keep spill kits on site for use in the event of a spill. Consistent with the Proposed Project, SDG&E would comply with all such laws, rules, and regulations governing the proper handling and disposal of hazardous materials. Materials used during O&M of Alternative Route 5 or the Proposed Project would be applied, stored, and disposed of by licensed professionals and in accordance with applicable regulations and manufacturer recommendations.

As a result, Alternative Route 5 would result in a less-than-significant impact to emitting hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Alternative Route 5 could result in a greater potential impact compared to the Proposed Project, which would not be located within 0.25 mile of an existing or proposed school.

Based on review of the GeoTracker and EnviroStor databases, Alternative Route 5 would be located within 100 feet of several known hazardous sites with a past release, but all of the sites are designated as Completed – Case Closed on GeoTracker. The following sites within 100 feet of Alternative Route 5 are listed as closed:

- 7-Eleven Food Store located at 14110 Olde Highway 80 in El Cajon. The potential contaminant of concern was gasoline. The potential media of concern was an aquifer used for drinking water.

- Pacific Bell located at 14470 Olde Highway 80 in El Cajon. The potential contaminants of concern were waste oil, motor, hydraulic, and lubricating. Potential media of concern was the soil.

- Precision Bellows MFG located at 15303 Olde Highway 80 in El Cajon. The potential contaminant of concern was diesel. Potential media of concern was soil.

- Kamps Propane Inc. located at 16245 Alpine Boulevard in Alpine. Potential contaminations of concern were waste oil, motor, hydraulic, and lubricating. Potential media of concern was soil.

- County of San Diego located at 2914 Tavern Road in Alpine. The potential contaminant of concern was diesel. The potential media of concern was an aquifer used for drinking water.

Alternative Route 5 would have no impact on creating a significant hazard due to its location on a hazardous materials site because all cases are closed. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to creating a significant hazard to the public or environment due to its location on a hazardous materials site.

Like the Proposed Project, Alternative Route 5 would not be located within 2 miles of a public airport or within the boundaries of airport land use plan. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to a safety hazard for people residing or working in the Proposed Project Area.

Temporary closures during the construction of Alternative Route 5 would be coordinated with the Caltrans, local jurisdictions, and emergency service providers through the encroachment permit process and any required traffic control plans. An underground segment of Alternative Route 5 would cross I-8 which could potentially be used as an evacuation route and would require brief closures during construction. Like the Proposed Project, Alternative Route 5 would implement MM TRA-1, and emergency service providers would be provided notice before commencement of construction activities that would require lane closures. Like the Proposed

Project, O&M of the other new underground segments of Alternative Route 5 may require temporary lane closures. Traffic control measures would be implemented, and emergency vehicles would be provided access. Construction of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to an emergency response or emergency evacuation plan after mitigation. However, construction of Alternative Route 5 may result in greater potential impacts to evacuation routes compared to construction of the Proposed Project because Alternative Route 5 would cross a potential evacuation route, I-8. O&M of Alternative Route 5 or the Proposed Project would result in no impact to an emergency response or emergency evacuation plan after mitigation.

Like the Proposed Project, Alternative Route 5 would be located in Tier 2 and Tier 3 CPUC HFTDs. Alternative Route 5 would cross Tier 2 HFTDs for approximately 5.2 miles (approximately 2.00 miles longer than the Proposed Project) and Tier 3 HFTDs for approximately 11.1 miles (approximately 00.2 mile shorter than the Proposed Project). Consistent with the Proposed Project, construction personnel could be exposed to a wildland fire during construction. Risk to personnel would most likely come from the inability to avoid or escape a wildland fire. To prevent wildfires during construction of Alternative Route 5 or the Proposed Project, SDG&E would implement its Fire Prevention Plan, which includes training; drills; procedures for fire response, reporting, and prevention; necessary fire prevention equipment; coordination with local and federal fire officials; and identification of daily site-specific risk conditions. The overhead segment of Alternative Route 5 would be approximately 4.5 miles shorter compared to the overhead segment of the Proposed Project which could reduce wildfire risking during the O&M phase compared to the Proposed Project. During O&M of Alternative Route 5 or the Proposed Project, SDG&E's vegetation management programs would clear vegetation adjacent to transmission lines within CPUC HFTDs and would clear vegetation within a 10-foot radius of poles within areas of CAL FIRE jurisdiction. Consistent with the Proposed Project, a majority of Alternative Route 5 O&M activities would be conducted along existing paved roads where the risk of igniting vegetation is generally low. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to exposing people or structures to a significant risk of loss, injury, or death from wildland fires. However, construction of Alternative Route 5 may result in greater potential impacts to people and structures compared to the Proposed Project because Alternative Route 5 would exist in close proximity to a greater number of residences compared to the Proposed Project. O&M of Alternative Route 5 may result in less potential impacts compared to O&M of the Proposed Project because the overhead segment of Alternative Route 5 would be shorter in length compared to the overhead segment of the Proposed Project.

6.4.4.2.10 Hydrology and Water Quality

Like the Proposed Project, construction of Alternative Route 5 would require ground-disturbing activities that could increase soil erosion rates that could potentially result in sedimentation or the discharge of fill in or adjacent to downstream waterbodies, which would be a violation of water quality standards. Materials used during construction (e.g., diesel fuel, hydraulic fluid, oils, grease, and concrete) have the potential to be transported by storm water runoff and threaten aquatic life or groundwater quality in the event of spills or leaching. These materials could violate water quality standards if they contact storm water discharges and/or are transported to nearby water resources. As with the Proposed Project, SDG&E's standard WEAP would include

training on the transport, handling, and disposal of hazardous materials. In addition, like the Proposed Project, SDG&E would implement the BMPs included in SDG&E's Water Quality Construction BMPs Manual to avoid and minimize impacts to water quality.

A SWPPP would be developed for Alternative Route 5 or the Proposed Project; this SWPPP would assess the route's risk to water quality based on site-specific soil characteristics, slope, and the construction schedule, and it would implement appropriate BMPs to maintain protection of water quality. The SWPPP would specify measures for each activity that has the potential to degrade surrounding water quality. If temporary and/or permanent ground disturbance impacts to water features could not be avoided by Alternative Route 5 or the Proposed Project, SDG&E would secure the required permits and comply with the terms of the permits to avoid or reduce impacts to water quality. Consistent with the Proposed Project, during O&M of Alternative Route 5, all materials would be applied, stored, and disposed of with appropriate containment in a manner consistent with manufacturer recommendations and in accordance with applicable regulations. No additional ground disturbance is anticipated during O&M of Alternative Route 5 or the Proposed Project. The O&M activities for Alternative Route 5 or the Proposed Project may include intermittent dewatering of utility vaults; however, SDG&E would obtain coverage under General Order 2014-0174-DWQ and adhere to the requirements therein. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to water quality standards or waste discharge requirements. However, O&M of Alternative Route 5 could require increased dewatering of utility vaults compared to the Proposed Project due to the likely greater number of utility vaults along the longer underground alignment of Alternative Route 5 compared to the Proposed Project.

Consistent with the Proposed Project, Alternative Route 5 structure foundations would be up to 40 feet below ground level and groundwater is not anticipated to be encountered. If groundwater is encountered during construction of Alternative Route 5 or the Proposed Project, excavations would be dewatered using one or more pumps and the water would be either discharged on site, if permitted, or stored in Baker tanks or similar water retention equipment within staging areas prior to disposal off site. SDG&E would confirm that the water sources used during construction of Alternative Route 5 or the Proposed Project would have adequate capacity prior to sourcing water from them. Consistent with the Proposed Project, O&M of Alternative Route 5 would not require or deplete groundwater as O&M would not require water beyond what is used at the existing Suncrest Substation and impervious surfaces would not be expanded or newly installed. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to groundwater supplies or recharge. O&M of Alternative Route 5 or the Proposed Project would result in no impact to groundwater supplies or recharge.

Minor grading involved during construction of Alternative Route 5 or the Proposed Project would not substantially increase the existing velocity or volume of storm water flows either on site or in off-site areas. Consistent with the Proposed Project, all temporary work areas disturbed during grading would be restored to their original contours, and the surrounding area would be restored and repaired, as appropriate. Like the Proposed Project, permanent work areas would be designed to maintain existing flow patterns and flow velocities by outsloping and the use of rock energy dissipaters as needed. Vegetation removal, restoration, and grading would be conducted in accordance with the BMPs outlined in the SWPPP for Alternative Route 5 or the Proposed Project. If temporary and/or permanent ground disturbance impacts to water features could not

be avoided by Alternative Route 5 or the Proposed Project, SDG&E would secure the required permits and comply with the terms of the permits to reduce impacts to existing drainage patterns and hydrology. As with the Proposed Project, O&M would not involve any activities that would require the alteration of drainage patterns or the increase of impervious surfaces. Maintenance of Alternative Route 5 or the Proposed Project would be performed by small crews traveling on established access roads and would not require water beyond what is currently used at the existing Suncrest Substation. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to existing drainage patterns. O&M of Alternative Route 5 or the Proposed Project would result in no impact to existing drainage patterns.

Alternative Route 5 would cross a portion of FEMA Zone A adjacent to South Grade Road in an underground configuration. Zone A corresponds to a 100-year flood zone. As Alternative Route 5 would be installed underground in this area, surface water flows would not be impacted, and the undergrounded cables would be unlikely to contact surface flood waters during a flood event. The Proposed Project would span a FEMA Zone AE, as feasible, and the infrastructure would be unlikely to contact surface water flows. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the risk of pollutants in a flood hazard, tsunami, or seiche zone.

During construction of Alternative Route 5 or the Proposed Project, BMPs would be implemented to reduce the potential for the discharge of water pollutants in accordance with the statewide CGP and San Diego Basin Plan. Water use during construction and O&M of Alternative Route 5 would be similar to that of the Proposed Project, relatively minimal, and provided in coordination with the local water agencies. Further, there is currently no existing sustainable groundwater management plan for the groundwater basins in which Alternative Route 5 or the Proposed Project would be located. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to a water quality control plan or sustainable groundwater management plan.

6.4.4.2.11 Land Use and Planning

Alternative Route 5 would traverse residential neighborhoods but would parallel existing utility corridors where feasible. Short-term construction activities (e.g., temporary lane closures, construction staging, and equipment movement) could temporarily limit access within residential areas but would not divide communities. Once operational, Alternative Route 5 would not alter existing circulation patterns, block access, or otherwise divide established communities. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to physically dividing an established community.

Alternative Route 5 would cross areas where the following land use plans that apply to the Proposed Project would also apply:

- Southern California National Forests Land Management Plan,
- Region 5 Supplement to Forest Service Manual 2700, and
- San Diego County General Plan.

The consistency analysis for these land use plans that is described in Section 3.12 Land Use and Planning for the Proposed Project also applies to Alternative Route 5, and the analysis did not identify any inconsistencies with any land use plans. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to a conflict with any land use plan, policy, or regulation.

6.4.4.2.12 Mineral Resources

Alternative Route 5 would cross an MRZ-3 – which corresponds to areas containing known or inferred mineral occurrences of undetermined mineral resource significance – for approximately 9.8 miles, which is 2.8 more miles compared to the Proposed Project. Consistent with the Proposed Project, no active mines or designated extraction areas intersect Alternative Route 5, and Alternative Route 5 would not cross any areas zoned for extractive mineral use. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to the loss of availability of a known mineral resource that would be of value to the region or the residents of the state or impact on the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

6.4.4.2.13 Noise

Trench excavation during construction of Alternative Route 5 is anticipated to use the same equipment and excavation techniques as the Proposed Project. The Proposed Project was modeled to generate a maximum eight-hour noise level approximately 89.4 dBA during trench excavation at the proposed 230 kV underground segment, which would be significant for residences within 160 feet of the construction. Only portions of the approximately 3.1-mile-long proposed 230 kV western underground segment would cross within 160 feet of residences. Alternative Route 5 would install approximately 4.1 miles of transmission line in an underground configuration along Tavern Road and South Grade Road in the community of Alpine through a residential area where numerous houses would be within 160 feet of the construction. Like the Proposed Project, implementation of MM NOI-01 would reduce the noise levels created by Alternative Route 5 construction to be within County thresholds and would provide compensation to residents for temporary relocation where noise levels cannot be reduced to below 75 dBA on average over an eight-hour period. Additionally, the implementation of APM NOI-01 would confirm that construction of Alternative Route 5 adheres to the County's Noise Ordinance in instances where activities are required outside of typical construction hours. During O&M, the corona level of the overhead segment of Alternative Route 5 would be similar to the Proposed Project as both are 230 kV lines. A 230 kV overhead transmission line would be expected to generate approximately 36 dBA directly below the line in foul weather. This noise would be generally below existing ambient levels at the nearest sensitive receptors and well below any applicable noise standards. Alternative Route 5 would be installed in an underground configuration for approximately 9.9 miles and underground portions would be inaudible during normal operation. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to an increase in ambient noise levels in excess of standards after mitigation. However, construction of Alternative Route 5 would likely result in a greater potential impact to residences compared to construction of the Proposed Project because a greater number of residences would likely need to be relocated if noise cannot be reduced to be within County thresholds.

Vibratory rollers generate ground-borne vibration levels of 0.21 inch per second PPV at 25 feet; and the FTA's threshold of significance is 0.2 inch per second PPV for building structural damage (non-engineered timber and masonry buildings) (FTA 2018). Therefore, ground-borne vibration from the use of a vibratory roller would exceed the threshold of significance if the use occurs within 26 feet of a sensitive receptor. Like the Proposed Project, Alternative Route 5 would require repaving after installation of underground segments. The repaving work could likely occur within 26 feet of several sensitive receptors along South Grade Road and Tavern Road. As a result, and unlike the Proposed Project, construction of Alternative Route 5 could result in a potentially significant impact that likely cannot be mitigated. Like the Proposed Project, O&M of Alternative Route 5 would not involve equipment that would generate ground-borne vibration or noise in excess of significance criteria for structural damage. Construction of Alternative Route 5 would result in a potentially significant impact to excessive ground-borne vibration or noise levels, and construction of the Proposed Project would result in a less-than-significant impact to excessive ground-borne vibration or noise levels. O&M of Alternative Route 5 or the Proposed Project would result in no impact to excessive ground-borne vibration or ground-borne noise levels.

Consistent with the Proposed Project, Alternative Route 5 would not be located within the vicinity of a private airstrip or within 2 miles of a public airport or public use airport. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to exposing people residing or working at the site to excessive noise levels from aircraft.

6.4.4.2.14 Population, Employment, and Housing

Like the Proposed Project, Alternative Route 5 would not introduce any new housing, businesses, or other land use changes that would induce substantial unplanned population growth or housing demand in or near Alternative Route 5. Construction of Alternative Route 5 would require a similar crew size as the Proposed Project and would be constructed by current SDG&E employees and/or subcontractors. O&M of Alternative Route 5 or the Proposed Project would be performed by current SDG&E employees local to the area. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to inducing substantial unplanned population growth.

Alternative Route 5 would not cause the substantial displacement of existing people or housing. Compared to the Proposed Project, Alternative Route 5 would be located south of a home where potential relocation of the residents may be required for the Proposed Project. However, Alternative Route 5 could require the relocation of residents in excess of potential relocations required for the Proposed Project due to its proximity to residences. An estimated number of relocations has not been determined at this time. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to the substantial displacement of existing people or housing. However, construction and O&M of Alternative Route 5 could result in the displacement of a greater number of existing people or houses compared to construction and O&M of the Proposed Project.

6.4.4.2.15 Public Services

In the event of a fire during construction or O&M of Alternative Route 5 or the Proposed Project, a temporary increase in the demand for fire services would occur. However, consistent with the

Proposed Project, Alternative Route 5 would not require an expansion of fire services or new or physically altered fire departments to maintain acceptable response times and service ratios. Alternative Route 5 would implement the same fire prevention practices as the Proposed Project. To minimize risk of starting a fire, vehicles would not be staged or parked on vegetation, and SDG&E would clear and trim vegetation in work areas prior to construction in order to minimize fire risk. Additionally, SDG&E would implement its Fire Prevention Plan during construction of Alternative Route 5 or the Proposed Project. Any road closures required during construction of Alternative Route 5 would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans as with the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the provision of new or physically altered fire facilities to maintain service ratios or response times.

Consistent with the Proposed Project, the need for police services may arise during construction (e.g., for theft or vandalism of construction equipment) of Alternative Route 5, but the need would not exceed the capacity of the existing providers in the vicinity and would not require services beyond existing capacities. Any road closures required during construction of Alternative Route 5 or the Proposed Project would be coordinated with local jurisdictions and emergency service providers through the encroachment permit process and any required traffic control plans. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to the provision of new or physically altered police facilities to maintain service ratios or response times.

Construction of a portion of Alternative Route 5 would occur along Olde Highway 80, which is used to access Rios Elementary School and Flinn Springs Park. Additionally, construction of Alternative Route 5 would occur along Tavern Road, which is used to access Boulder Creek Elementary and Joan MacQueen Middle School. As with the Proposed Project, temporary road closures would be coordinated with local jurisdictions through the encroachment permit process and any required traffic control plans. These permits may require the application of appropriate traffic control measures during this work to verify that disruptions to school access and park access are minimized. No temporary park closures are anticipated during the construction of Alternative Route 5 or the Proposed Project. Similarly, like the Proposed Project, construction of Alternative Route 5 is not anticipated to impact other public facilities such as hospitals and community centers due to their distance from Alternative Route 5 and the scope of construction. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to the provision of new or physically altered schools, parks, or other public facilities to maintain service ratios. However, construction and O&M of Alternative Route 5 may result in delays in access to public facilities for a greater number of users compared to construction and O&M of the Proposed Project.

6.4.4.2.16 Recreation

Like the Proposed Project, Alternative Route 5 would cross the Loveland Reservoir Trail and the CRHT and sections of the trail at the points of the transmission line crossings would be temporarily and intermittently closed during construction of the transmission line. SDG&E would implement APM REC-01 to post signage at the trails, include closure information on facility websites, and provide advanced notice of Alternative Route 5 activities prior to construction. In accordance with APM REC-02, SDG&E would give advance notice of Alternative Route 5 or Proposed Project activities to authorities for recreational facilities subject to access restrictions no less than four weeks prior to construction. The temporary trail closures may result in minor, temporary increased use of other trails. However, as only approximately two existing trails may require temporary and partial closures, the trail closures would not result in a significant increase in the use of existing parks or recreational facilities as with the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur or be accelerated.

As with the Proposed Project, Alternative Route 5 would not include the construction of any recreational facilities. O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area like the Proposed Project, and O&M would not increase the use of existing parks or other recreational facilities. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to the construction or expansion of recreational facilities.

6.4.4.2.17 Transportation

Consistent with the Proposed Project, SDG&E would obtain an encroachment permit from the County and Caltrans, which would include conditions (e.g., work site traffic control plans) that would minimize traffic delays during construction of Alternative Route 5. Traffic control plans for Alternative Route 5 or the Proposed Project would implement protective measures in accordance with MM TRA-01 such as lighting, flaggers, traffic control cones, electronic signage, fixed roadway warning signs, and any other measures required by the Director of the County's Department of Public Works to protect the traveling public. Like the Proposed Project, O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area and would require one trip per year by crews of two people and two to three trucks, a boom or line truck, an aerial-lift truck, and/or an assist truck. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to conflicting with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities after mitigation.

The estimated daily VMT during construction of Alternative Route 5 would be similar to the estimated daily VMT of the Proposed Project. Increase in San Diego County's VMT from construction of Alternative Route 5 would be periodic and temporary depending on the location of construction workers and work areas as with the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area, and the annual maintenance trip would result in a negligible annual VMT.

Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to conflicting or being inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Like the Proposed Project, Alternative Route 5 would not require the construction of geometric design features that would increase hazards. Encroachment permits from the County and Caltrans would be secured as required and corresponding traffic control plans would be prepared, approved by the County and/or Caltrans, and implemented prior to any lane closures. In accordance with MM TRA-01, prior to construction, appropriate traffic control measures would be configured adjacent to egress and ingress locations at each work area within roadways, such as lighting, flaggers, traffic control cones, electronic signage, and fixed roadway warning signs. Consistent with the Proposed Project, O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area, and it would not introduce geometric design features or incompatible uses. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to increasing hazards due to a geometric design feature or incompatible uses after mitigation.

Temporary closures during construction of Alternative Route 5, including brief closures of I-8 during construction, would be coordinated with Caltrans, the County, and emergency service providers. Like the Proposed Project, Alternative Route 5 would implement MM TRA-01, and emergency service providers would be provided notice before commencement of construction activities that would require lane closures. O&M of Alternative Route 5, like the Proposed Project, would be conducted under SDG&E's existing O&M program that serves the area, and annual checks and periodic maintenance trips would result in a negligible annual VMT. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to emergency access after mitigation. However, construction and O&M of Alternative Route 5 would result in a greater potential impact to lane closures as the route would be installed in an underground configuration along a longer length of roads compared to the Proposed Project.

6.4.4.2.18 Tribal Cultural Resources

Portions of the Alternative Route 5 alignment were covered by the pedestrian survey of the Proposed Project's study area. However, the majority of the Alternative Route 5 alignment was not covered by pedestrian survey efforts. Alternative Route 5 would implement the same measure for unanticipated tribal cultural resource discoveries as the Proposed Project. In accordance with APM TRIB-01, inadvertent discoveries of tribal cultural resources during construction will halt operations within 50 feet, requiring immediate communication with the Native American monitor, Principal Investigator, and SDG&E's Cultural Resource Specialist, who will determine necessary actions in coordination with CPUC before resuming work. Although Alternative Route 5 is longer than the Proposed Project, both alignments present a risk of encountering undiscovered resources during construction. Further, the increased length of the Alternative Route 5 alignment by approximately 1.9 miles compared to the Proposed Project would be unlikely to contribute to a greater likelihood of encountering undiscovered resources as Alternative Route 5 traverses previously disturbed residential areas and existing roads for a greater distance compared to the Proposed Project. O&M of Alternative Route 5 would be incorporated into SDG&E's existing O&M program and would not involve substantial ground

disturbance. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to the substantial adverse change in the significance of a tribal cultural resource. O&M of Alternative Route 5 or the Proposed Project would result in no impact to the substantial adverse change in the significance of a tribal cultural resource.

6.4.4.2.19 Utilities and Service Systems

Alternative Route 5 would result in similar water use, sanitary waste, and storm water runoff as the Proposed Project. Consistent with the Proposed Project, SDG&E would confirm that water sources have adequate capacity prior to sourcing water from municipal water sources or water supply vendors. No new or relocated permanent sewer infrastructure would be required to accommodate sanitary waste produced during construction, and self-contained portable toilets would be used for Alternative Route 5 or the Proposed Project. Storm water would be conveyed primarily through existing natural drainage patterns as with the Proposed Project. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area and would not require relocated, new, or expanded water, wastewater treatment, or stormwater drainage facilities. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to relocated, new, or expanded water, wastewater treatment, or stormwater drainage facilities. O&M of Alternative Route 5 or the Proposed Project would result in no impact to relocated, new, or expanded water, wastewater treatment, or stormwater drainage facilities.

Alternative Route 5 would construct a new 230 kV transmission line that is approximately 1.9 miles longer than the Proposed Project and would include optical ground wire for fiber optic communication. As with the Proposed Project, to provide temporary construction power and a backup power source, portable gas/diesel generators would be used. If a nearby existing overhead distribution system is available, it may be tapped to provide power. SDG&E would contact Underground Service Alert prior to ground-disturbing work and would probe and expose existing utilities that may be in close proximity to Alternative Route 5 or the Proposed Project. Construction methods would be adjusted as necessary to maintain that the integrity of existing utility lines is not compromised. Like the Proposed Project, O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area and would not require relocated, new, or expanded electrical, natural gas, and telecommunication facilities. Construction of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to relocated, new, or expanded electrical, natural gas, and telecommunication facilities. O&M of Alternative Route 5 or the Proposed Project would result in no impact to relocated, new, or expanded electrical, natural gas, and telecommunication facilities.

Alternative Route 5 would require a similar amount of water during construction as required by the Proposed Project, accounting for a small percentage of available water supply of the Padre Dam Municipal Water District and Sweetwater Authority. Consistent with the Proposed Project, O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area and would not require water beyond what is currently used at the existing Suncrest Substation. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to water supplies.

During construction of Alternative Route 5 or the Proposed Project, portable toilets would be provided for workers. O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area and may require portable toilets during certain maintenance activities. As with the Proposed Project, sanitary waste would be disposed of at a properly licensed facility with adequate capacity. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to demand for wastewater treatment.

The solid waste generated by the construction of Alternative Route 5 would be similar to the amount of solid waste generated by construction of the Proposed Project. Solid waste generated by Alternative Route 5 or the Proposed Project would represent a small fraction of the total remaining capacity of the Sycamore Landfill. Like the Proposed Project, O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area, and solid waste generated during O&M would be minimal and infrequent. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a similar and less-than-significant impact to solid waste.

As with the Proposed Project, SDG&E would comply with federal, state, and local laws regarding solid waste. Construction and O&M of Alternative Route 5 or the Proposed Project would result in no impact to non-compliance with federal, state, or local statues and regulations related to solid waste.

6.4.4.2.20 Wildfire

Unlike the Proposed Project, Alternative Route 5 would cross I-8 at three locations and I-8 could potentially be used as an evacuation route. Based on the acquisition of applicable encroachment permits and the implementation of traffic control measures, Alternative Route 5 would not conflict with emergency evacuation or response plans. Like the Proposed Project, O&M of Alternative Route 5 would be conducted under SDG&E's existing O&M program that serves the area, and routine maintenance would not result in a substantial increase in vehicle traffic or activities that could impair an emergency response plan or emergency evacuation plan. Construction of Alternative Route 5 or the Proposed Project would result in less-than-significant impact to an emergency response plan or emergency evacuation plan. However, Alternative Route 5 could result in greater potential impacts to evacuation routes compared to the Proposed Project as it would cross I-8. O&M of Alternative Route 5 or the Proposed Project would result in no impact to an emergency response plan or emergency evacuation plan.

Alternative Route 5 would cross very high FHSZs for approximately 10.8 miles, which is approximately 0.7 mile shorter than the Proposed Project's crossing of very high FHSZs, and cross similar topography to that of the Proposed Project. The overhead segments of Alternative Route 5 would cross very high FHSZs for approximately 3.5 miles, which is approximately 4.5 miles shorter than the distance that the Proposed Project's overhead segment would cross very high FHSZs. The risk posed to construction personnel would likely come from the inability to avoid or escape wildfire. To prevent wildfires during construction of Alternative Route 5 or the Proposed Project, SDG&E would implement its Fire Prevention Plan, which includes training; drills; procedures for fire response, reporting, and prevention; necessary fire prevention equipment; coordination with local and federal fire officials; and identification of daily site-specific risk conditions. During O&M of Alternative Route 5 or the Proposed Project, SDG&E's

vegetation management programs would clear vegetation adjacent to transmission lines within CPUC HFTDs and would clear vegetation within a 10-foot radius of poles within areas of CAL FIRE jurisdiction. Consistent with the Proposed Project, majority of O&M activities would be conducted along existing paved roads where the risk of igniting vegetation is generally low. Construction and O&M of Alternative Route 5 or the Proposed Project would result in a less-than-significant impact to exacerbating wildfire risks. However, construction and O&M of Alternative Route 5 may result in less of an impact compared to construction and O&M of the Proposed Project as a shorter length of the overall 230 kV transmission line crossings of very high FHSZs as well as the overhead segments of the line would cross very high FHSZs compared to the overhead segment of the Proposed Project.

Alternative Route 5 would introduce a similar area of impervious surfaces as the Proposed Project, confined to the poles that would be installed. Like the Proposed Project, Alternative Route 5 would not increase existing flood risk levels as flood flows would flow around the poles. Consistent with the Proposed Project, SDG&E would implement a SWPPP that would include erosion-reducing measures and site stabilization. O&M of Alternative Route 5 or the Proposed Project would be conducted under SDG&E's existing O&M program that serves the area and would not change the slope of the area or affect existing drainages. Construction and O&M of Alternative Route 5 and the Proposed would result in a similar and less-than-significant impact to downslope or downstream flooding or landslides.

6.4.4.3 Conclusion

Environmental resource criteria where Alternative Route 5 would result in a change in impacts to the criteria compared to the Proposed Project are summarized in Table 6-4: Summary of Alternative Route 5 Impacts Compared to the Proposed Project. Construction and/or O&M of Alternative Route 5 would result in a relative increase in impacts to 15 resource criteria and a relative decrease in impacts to seven resource criteria compared to the Proposed Project. For ground-borne vibration or noise, Alternative Route 5 would result in an unavoidable potentially significant impact.

As a result, Alternative Route 5 has similar, and only marginally greater, potential impacts to environmental resources for the majority of environmental resource criteria, but Alternative Route 5 introduces a potentially significant and unavoidable impact to ground-borne vibration compared to the Proposed Project.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As summarized in Table 6-5: Summary of the Proposed Project Impact Determinations and Alternatives Impact Determinations, the Proposed Project would not result in any significant or unavoidable environmental impacts after mitigation is incorporated. The No Project Alternative would reduce the significance of 18 environmental resource impacts from less-than-significant to no impact compared to the Proposed Project, but the No Project Alternative would not meet any Proposed Project objectives.

Table 6-4: Summary of Alternative Route 5 Impacts Compared to the Proposed Project

Environmental Resource Criteria	Increase or Decrease in Impact Compared to Proposed Project	Significance of Proposed Project Impact	Significance of Alternative Route 5 Impact
Scenic resources within a state scenic highway	Increase	No Impact	LTS
Existing visual character of quality of public views	Increase	LTS	LTS After Mitigation
Prime Farmland, Unique Farmland, or Farmland of Statewide Importance	Increase	No Impact	LTS
Exposing sensitive receptors to substantial pollutant concentrations	Increase	LTS	LTS
Other emissions that would adversely affect a substantial number of people	Increase	LTS	LTS
Sensitive species and their habitats	Increase (Construction) Decrease (O&M)	LTS After Mitigation	LTS After Mitigation
Riparian area or sensitive natural communities	Decrease	LTS After Mitigation	LTS After Mitigation
Wildlife movement	Decrease	LTS	LTS
Collision or electrocution risk for birds or bats	Decrease	LTS	LTS
Soil erosion or loss of topsoil	Decrease	LTS	LTS
Emitting hazardous emissions or handling hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school	Increase	No Impact	LTS
Impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan	Increase	LTS After Mitigation	LTS After Mitigation
Exposing people or structures to a significant risk of loss, injury, or death from wildland fires	Increase (Construction) Decrease (O&M)	LTS	LTS
Water quality standards or waste discharge requirements	Increase	LTS	LTS
Ambient noise levels in excess of standards	Increase	LTS After Mitigation	LTS After Mitigation
Excessive ground-borne vibration or noise levels	Increase	LTS	Potentially Significant
Displacement of existing people or housing	Increase	LTS	LTS

Environmental Resource Criteria	Increase or Decrease in Impact Compared to Proposed Project	Significance of Proposed Project Impact	Significance of Alternative Route 5 Impact
Access to schools, parks, or other public facilities	Increase	LTS	LTS
Inadequate emergency access	Increase	LTS After Mitigation	LTS After Mitigation
Wildfire risks	Decrease	LTS	LTS

Note: All environmental resource criteria are from CEQA Appendix G criteria or discussed in the context of the CEQA Appendix G criteria in Chapter 3 – Environmental Impacts and Mitigation Measures and this chapter.

Table 6-5: Summary of the Proposed Project Impact Determinations and Alternatives Impact Determinations

Environmental Resource	Significance of Proposed Project Impact	Significance of No Project Alternative Impact	Significance of Alternative Route 4 Impact	Significance of Alternative Route 4B Impact	Significance of Alternative Route 5 Impact
Aesthetics	LTS	No Impact	LTS	LTS	LTS
Agriculture and Forestry Resources	LTS	No Impact	LTS	LTS	LTS
Air Quality	LTS	No Impact	LTS	LTS	LTS
Biological Resources	LTS After Mitigation	No Impact	LTS After Mitigation	LTS After Mitigation	LTS After Mitigation
Cultural Resources	LTS	No Impact	LTS	LTS	LTS
Energy	LTS	No Impact	LTS	LTS	LTS
Geology, Soils, and Paleontological Resources	LTS	No Impact	LTS	LTS	LTS
Greenhouse Gas Emissions	LTS	No Impact	LTS	LTS	LTS
Hazards, Hazardous Materials, and Public Safety	LTS	No Impact	LTS	LTS	LTS
Hydrology and Water Quality	LTS	No Impact	LTS	LTS	LTS
Land Use and Planning	No Impact	No Impact	No Impact	No Impact	No Impact
Mineral Resources	No Impact	No Impact	No Impact	No Impact	No Impact
Noise	LTS After Mitigation	No Impact	Potentially Significant	Potentially Significant	Potentially Significant
Population, Employment, and Housing	LTS	No Impact	LTS	LTS	LTS
Public Services	LTS	No Impact	LTS	LTS	LTS
Recreation	LTS	No Impact	LTS	LTS	LTS
Transportation	LTS After Mitigation	No Impact	LTS After Mitigation	LTS After Mitigation	LTS After Mitigation
Tribal Cultural Resources	LTS	No Impact	LTS	LTS	LTS

Environmental Resource	Significance of Proposed Project Impact	Significance of No Project Alternative Impact	Significance of Alternative Route 4 Impact	Significance of Alternative Route 4B Impact	Significance of Alternative Route 5 Impact
Utilities and Service Systems	LTS	No Impact	LTS	LTS	LTS
Wildfire	LTS	No Impact	LTS	LTS	LTS

Alternative Routes 4, 4B, and/or 5 would introduce marginally greater potential impacts to a number of environmental resources compared to the Proposed Project, including existing visual character or quality of public views; sensitive species and their habitats; exposing sensitive receptors to substantial pollutant concentrations; and access to schools, parks, or other public facilities. Construction of Alternative Routes 4, 4B, and/or 5 would result in a potentially significant and unavoidable impact to ground-borne vibration, whereas construction of the Proposed Project would result in a less-than-significant impact to ground-borne vibration. However, construction and O&M of Alternative Routes 4, 4B, and/or 5 would not result in a substantial increase in the significance of the impacts to the majority of environmental resources compared to the Proposed Project, as summarized in Table 6-5: Summary of the Proposed Project Impact Determinations and Alternatives Impact Determinations. As a result, the Proposed Project would be considered environmentally superior compared to the alternatives.

6.6 REFERENCES

APLIC. 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC and Sacramento, CA. Online. https://www.nrc.gov/docs/ML1224/ML12243A391.pdf. Site visited May 2025.

APLIC. 2012. Reducing Avian Collisions with Power Lines: The State of the Art in 2012. Edison Electric Institute and APLIC. Washington, DC. Online. https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf. Site visited May 2025.

CAISO. 2023. 2022-2023 Transmission Plan. Online. https://stakeholdercenter.caiso.com/RecurringStakeholderProcesses/2022-2023-Transmission-planning-process. Site visited April 2026.

California Air Resources Board. 2022. 2022 Scoping Plan Documents. Online. https://ww2.arb.ca.gov/resources/documents/2022-scoping-plan-documents. Online. Site visited October 2025.

California Department of Conservation. 2025. CGS Seismic Hazards Program: Liquefaction Zones. Online. https://data.ca.gov/dataset/cgs-seismic-hazards-program-liquefaction-zones. Site visited April 2025.

California Department of Education. 2025. Geo Hub. Online. https://data-cdegis.opendata.arcgis.com/. Site visited May 2025.

CAL FIRE. 2024. Fire Hazard Severity Zones. Online. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones. Site visited April 2025.

Caltrans. 2025. California State Scenic Highway. Online. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Site visited April 2025.

CDFW. 2024. California Natural Diversity Database. Online. https://wildlife.ca.gov/Data/CNDDB. Site visited December 2024.

County. 2007. County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements Visual Resources. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/visual_guidelines.pdf. Site visited February 2026.

County. 2011a. Section 2.6 Geology and Soils of the San Diego County General Plan Update EIR. Online. https://www.sandiegocounty.gov/content/sdc/pds/gpupdate/environmental.html. Site visited April 2025.

County. 2011b. San Diego County General Plan. Online. https://www.sandiegocounty.gov/content/dam/sdc/pds/docs/GP/GENERAL%20PLAN_April2022_PRINT.pdf. Site visited April 2025.

County. 2024. Zoning Ordinance. Online. https://www.sandiegocounty.gov/content/sdc/pds/zoning.html. Site visited May 2025.

CPUC. 2021. High Fire-Threat District. Online. https://capuc.maps.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa2. Site visited April 2025.

DTSC. 2025. EnviroStor. Online. https://dtsc.ca.gov/your-envirostor/. Site visited October 2025.

FEMA. 2025. Flood Maps. Online. https://www.fema.gov/flood-maps. Site visited October 2025.

FTA. 2018. Transit Noise and Vibration Impact Assessment Manual. Online. https://www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123. Site visited April 2025.

Natural Resources Conservation Service. 2019. Web Soil Survey. Online. https://websoilsurvey.nrcs.usda.gov/app/. Site visited April 2025.

San Diego Natural History Museum Department of PaleoServices. 2025. Paleontological Resources Technical Report for the San Diego Gas & Electric Company Sycamore Canyon 230 kV Loop-In to Suncrest Project.

SWRCB. 2025. GeoTracker. Online. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Search+GeoTracker. Site visited October 2025.

U.S. Department of Agriculture (USDA). 2002. Hydrologic Soil Groups. Online. https://efotg.sc.egov.usda.gov/references/Public/PR_defunct/FOTGHydrologicGroups.pdf. Site visited April 2025.

USDA. 2005. Land Management Plan.

USGS. 2025a. Interactive U.S. Fault Map. Online. https://www.usgs.gov/tools/interactive-us-fault-map. Site visited April 2025.

USGS. 2025b. U.S. Landslide Inventory and Susceptibility Map. Online. https://www.usgs.gov/tools/us-landslide-inventory-and-susceptibility-map. Site visited April 2025.

ATTACHMENT 6-A: SUMMARY OF ALTERNATIVE ROUTES PRELIMINARY SCREENING ANALYSIS

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ATTACHMENT 6-A: SUMMARY OF ALTERNATIVE ROUTES PRELIMINARY SCREENING ANALYSIS

The purpose of the Suncrest 230 Kilovolt (kV) Loop-In Project (Proposed Project) is to address operational challenges and thermal overloads on San Diego Gas & Electric Company's (SDG&E's) existing transmission lines from the existing Suncrest Substation to the existing Sycamore Canyon Substation and existing transformers at the Suncrest Substation, as identified by California Independent System Operator (CAISO) in its 2022-2023 Transmission Plan. In addition, per the CAISO technical specifications, the Proposed Project is required to be energized by 2032. To meet the Proposed Project purpose, the Proposed Project includes the following objectives:

1. meet SDG&E's obligation to implement the CAISO-approved project;
2. improve system reliability for SDG&E's approximately 3.7 million energy customers as well as the electrical grid as a whole;
3. increase capacity to meet the forecasted load demands related to electrification;
4. address operational challenges and thermal overloads on SDG&E's existing transmission lines (TLs) (i.e., TL23054 and TL23055);
5. address operational challenges and thermal overloads on existing transformers at SDG&E's existing Suncrest Substation;
6. achieve commercial operation by 2032 to timely address critical reliability issues within the transmission system;
7. locate the Proposed Project on land adjacent to SDG&E's existing rights-of-way (ROWs) or existing utility uses, or otherwise avoid, mitigate or minimize significant environmental impacts in a manner consistent with prudent transmission planning, to the extent practicable;
8. construct, operate, and maintain the facility with safety as a top priority;
9. maintain compliance with North American Electric Reliability Corporation standards; and
10. avoid or mitigate significant adverse impacts to both the environment and community to achieve a project that is designed for the greatest public good and least private injury.

The following table presents 14 alternative routes that were initially considered as alternative routes to the Proposed Project's route. As detailed in the table, alternative routes dismissed from further evaluation in the Environmental Impact Report (EIR) were determined to not meet the Proposed Project objective of achieving commercial operation by 2032, rendering the alternative routes infeasible. Any alternative determined to meet the Proposed Project objective of achieving commercial operation by 2032 was carried forward for further evaluation in the EIR, even if the alternative did not parallel SDG&E's existing ROWs or utility uses or would not otherwise avoid, mitigate, or minimize significant environmental impacts.

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Potential Alternative Route	Potential Alternative Route Length (Miles)	Meets all of the Proposed Project Objectives (Yes/No)	Discussion on Proposed Project Objectives Not Met	Determination of Analysis in the EIR
Alternative Route A	17.3	No	**Objective #6** – The alternative would cross land managed by Bureau of Indian Affairs (BIA), thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. Further, the alternative would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as there is not currently an interconnection point on the western terminus of the alternative. Due to the additional construction coordination required, an additional multiple-year delay to the Proposed Project schedule would be anticipated. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, a multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within Cleveland National Forest (CNF), a scenic resource[1], and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route A would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative would introduce aesthetics impacts through installing additional steel, vertical infrastructure adjacent to La Cresta Road as there is not currently an interconnection point on the western terminus of the alternative. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6, which aligns with the CAISO-specified energization date of 2032.
Alternative Route B	17.3	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. Further, the alternative would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as there is not currently an interconnection point on the western terminus of the alternative. Due to the additional construction coordination required, an additional multiple-year delay to the Proposed Project schedule would be anticipated. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route B would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative would introduce aesthetics impacts through installing additional steel, vertical infrastructure adjacent to La Cresta Road as there is not currently an interconnection point on the western terminus of the alternative. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.

[1] Scenic resources are landscape features that are considered visually or aesthetically pleasing and contribute to the character of a community or region.

Potential Alternative Route	Potential Alternative Route Length (Miles)	Meets all of the Proposed Project Objectives (Yes/No)	Discussion on Proposed Project Objectives Not Met	Determination of Analysis in the EIR
Alternative Route C	16.3	No	**Objective #6** - The alternative would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as there is not currently an interconnection point on the western terminus of the alternative. Due to the additional construction coordination required, an additional multiple-year delay to the Proposed Project schedule would be anticipated. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, a multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.
			Objective #7 – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route C would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative would introduce aesthetics impacts through installing additional steel, vertical infrastructure adjacent to La Cresta Road as there is not currently an interconnection point on the western terminus of the alternative. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	
Alternative Route D	17.0	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.
			Objective #7 – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route D would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative route would cross approximately 0.6 mile of the San Diego National Wildlife Refuge (NWR) managed by the United States Fish and Wildlife Service (USFWS) and approximately 0.2 mile of land managed by Endangered Habitats Conservancy, which could pose greater impacts to sensitive species and habitats compared to the Proposed Project as these areas are protected to conserve sensitive biological resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	

Potential Alternative Route	Potential Alternative Route Length (Miles)	Meets all of the Proposed Project Objectives (Yes/No)	Discussion on Proposed Project Objectives Not Met	Determination of Analysis in the EIR
Alternative Route E	17.1	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project by multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route E would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.
Alternative Route F	15.9	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route F would introduce approximately 3.0 miles of new infrastructure in locations where existing infrastructure is absent, which would require the construction of additional new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative route would cross approximately 0.6 mile of the San Diego NWR managed by the USFWS and approximately 0.2 mile of land managed by Endangered Habitats Conservancy, which could pose greater impacts to sensitive species and habitats compared to the Proposed Project as these areas are protected to conserve sensitive biological resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.

Potential Alternative Route	Potential Alternative Route Length (Miles)	Meets all of the Proposed Project Objectives (Yes/No)	Discussion on Proposed Project Objectives Not Met	Determination of Analysis in the EIR
Alternative Route G	16.0	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route G would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.
Alternative Route H	15.4	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project by multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route H would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative route would cross approximately 0.6 mile of the San Diego NWR managed by the USFWS and approximately 0.2 mile of land managed by Endangered Habitats Conservancy, which could pose greater impacts to sensitive species and habitats compared to the Proposed Project as these areas are protected to conserve sensitive biological resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.

Potential Alternative Route	Potential Alternative Route Length (Miles)	Meets all of the Proposed Project Objectives (Yes/No)	Discussion on Proposed Project Objectives Not Met	Determination of Analysis in the EIR
Alternative Route I	15.5	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route I would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.
Alternative Route J	16.5	No	**Objective #6** – The alternative would cross land managed by BIA, thus requiring the acquisition of easements and ROWs from the BIA that would delay the Proposed Project multiple years. The alternative would also cross an existing 500 kV transmission line, which would require raising the existing 500 kV transmission line. Due to the associated structural limitations, clearance requirements, and cost implications, an additional multiple-year delay to the Proposed Project schedule would be anticipated. In addition, the 500 kV transmission line is located within CNF, a scenic resource, and raising the 500 kV transmission line within CNF could result in greater impacts to visual resources. These factors could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would not parallel approximately 2.4 miles of the existing 500 kV transmission line that begins at the Suncrest Substation and travels southwest, which is paralleled by Alternatives 3B, 4, 4B, and 5. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route J would introduce approximately 3.0 miles of new infrastructure in locations where infrastructure is absent, which would require the construction of new access roads. These access roads could result in additional impacts to biological and cultural resources. The alternative route would cross approximately 1.3 miles of the San Diego NWR managed by the USFWS, approximately 0.8 mile of land managed by the California Department of Fish and Wildlife (CDFW), and approximately 1.74 miles of land managed by the Kumeyaay Diegueno Land Conservancy, which could pose greater impacts to sensitive species and habitats compared to the Proposed Project as these areas are protected to conserve sensitive biological resources. Further, if the alternative is undergrounded instead of constructed in an overhead configuration at the location of the 500 kV transmission line crossing, then undergrounding the segment would require the installation of two riser structures on either side of the 500 kV transmission line. The installation of four riser structures, in addition to construction of an underground duct bank, would result in additional ground disturbance and potential environmental impacts associated with ground disturbance (e.g., vegetation removal and potential impacts to sensitive species). Additionally, the riser structures would introduce aesthetic impacts through installing additional steel, vertical structures on USFS-administered land. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6 which aligns with the CAISO-specified energization date of 2032.

Potential Alternative Route	Potential Alternative Route Length (Miles)	Meets all of the Proposed Project Objectives (Yes/No)	Discussion on Proposed Project Objectives Not Met	Determination of Analysis in the EIR
Alternative Route 3B	14.7	No	**Objective #6** – The alternative would require additional infrastructure to interconnect the alternative to the existing transmission infrastructure, as there is not currently an interconnection point on the western terminus of the alternative. Due to the additional construction coordination required, an additional multiple-year delay to the Proposed Project schedule would be anticipated. This factor could potentially prevent the Proposed Project from achieving commercial operability by 2032. **Objective #7** – Compared to Alternatives 4, 4B, and 5, the alternative would parallel SDG&E's existing ROW or existing utility uses for fewer miles. More specifically, the alternative would require the acquisition of wide ROWs to accommodate the entirely overhead route. Due to the shorter overall length of new infrastructure parallel to existing infrastructure, it is anticipated that Alternative Route 3B would introduce new infrastructure in locations where infrastructure is absent, which could result in additional impacts to biological and cultural resources. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning. **Objective #8** – The alternative would require the siting of poles within existing roads which would create safety concerns due to the narrow widths of the roads. Therefore, the alternative would not be constructed in a way to maintain safety as a top priority. **Objective #10** – As the alternative would require the acquisition of new, wide ROWs to accommodate the entirely overhead route, construction of the alternative could result in greater impacts to both the environmental and the community. More specifically, due to the proximity of the alternative to nearby homes, it is likely that construction of the alternative could require the displacement of individuals from their existing residences due to safety concerns. Therefore, the alternative would not mitigate or avoid significant adverse impacts to both the environment and community.	Dismissed from further evaluation due to not meeting Proposed Project Objectives #6, 8 and 10.
Alternative Route 4	15.7	No	**Objective #7** – Biological resources and cultural resources impacts could potentially be greater than the Proposed Project due to the greater total length of the alternative route. The alternative route would cross approximately 0.9 mile of land managed by the CDFW and approximately 0.7 mile of land owned by Endangered Habitats Conservancy, which could pose greater impacts to sensitive species and habitats compared to the Proposed Project as these areas are protected to conserve sensitive biological resources. Additionally, the western portion of the alternative route would cross residential neighborhoods for a greater length compared to the Proposed Project, potentially introducing greater temporary construction impacts (e.g., noise, vibration, and odors) to sensitive receptors. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Evaluated due to meeting most of the Proposed Project Objectives, including the CAISO-specified energization date of 2032.
Alternative Route 4B	16.6	No	**Objective #7** – Biological resources and cultural resources impacts could potentially be greater than the Proposed Project due to the greater total length of the alternative route. The alternative route would cross approximately 0.9 mile of land managed by the CDFW and approximately 0.7 mile of land owned by Endangered Habitats Conservancy, which could pose greater impacts to sensitive species and habitats compared to the Proposed Project as these areas are protected to conserve sensitive biological resources. The western portion of the alternative route would cross residential neighborhoods for a greater length compared to the Proposed Project, potentially introducing greater temporary construction impacts (e.g., noise, vibration, and odors) to sensitive receptors. The western end and central portion of the alternative route would be located within and/or adjacent to low-income communities. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Evaluated due to meeting most of the Proposed Project Objectives, including the CAISO-specified energization date of 2032.
Alternative Route 5	16.4	No	**Objective #7** – The biological resources and cultural resources impacts would potentially be greater than the Proposed Project due to the greater total length of the alternative route. The western portion of the alternative route would cross residential neighborhoods for a greater length compared to the Proposed Project, potentially introducing greater temporary construction impacts (e.g., noise, vibration, and odors) to sensitive receptors. Therefore, the alternative would not avoid, mitigate, or minimize significant environmental impacts in a manner consistent with prudent transmission planning.	Evaluated due to meeting most of the Proposed Project Objectives, including the CAISO-specified energization date of 2032.

ATTACHMENT 6-B: ALTERNATIVES DISMISSED FROM FURTHER EVALUATION

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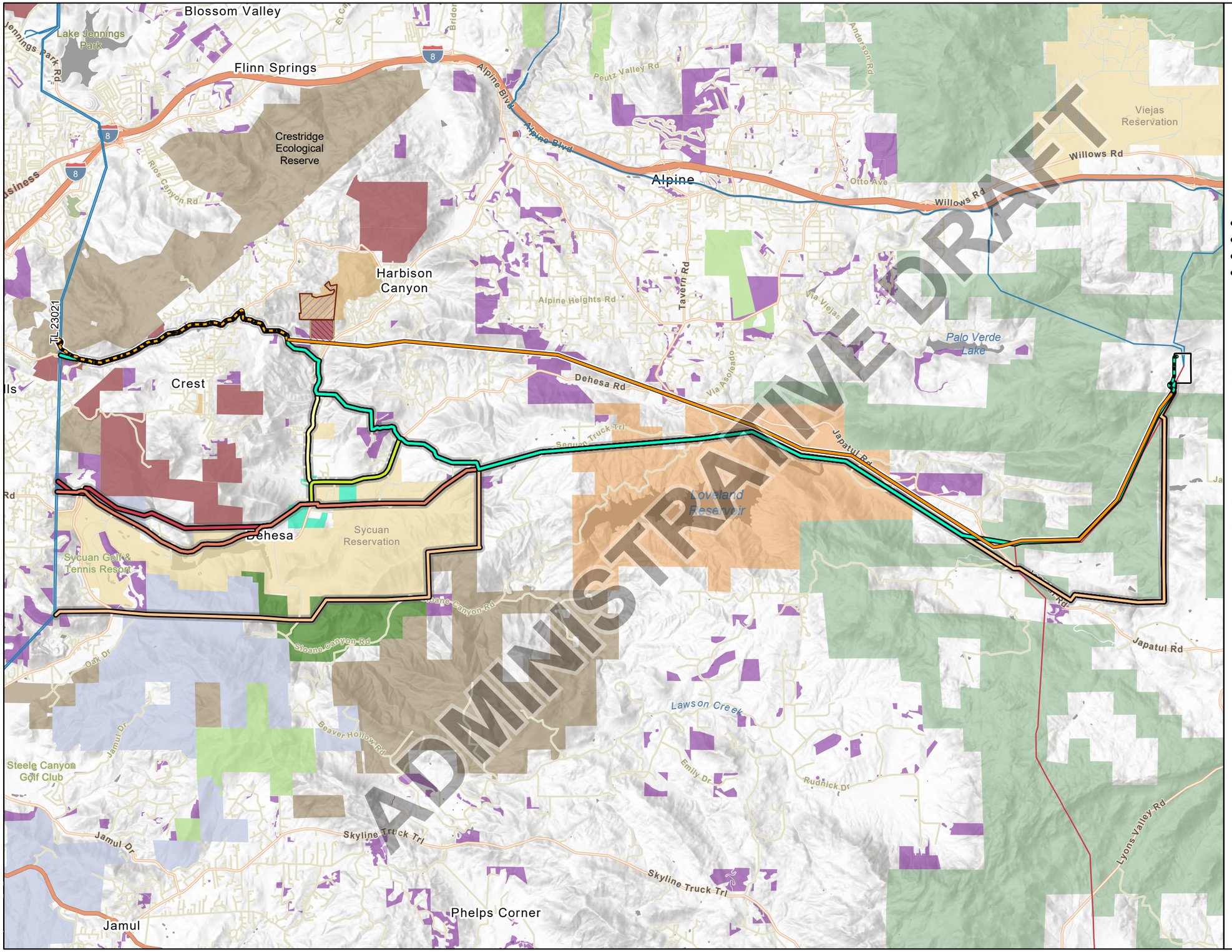

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Overview Map

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation

Alternative Route

- Route A
- Route B
- Route C
- Route D
- Route E
- Route F
- Route G
- Route H
- Route I
- Route J
- Route 3B

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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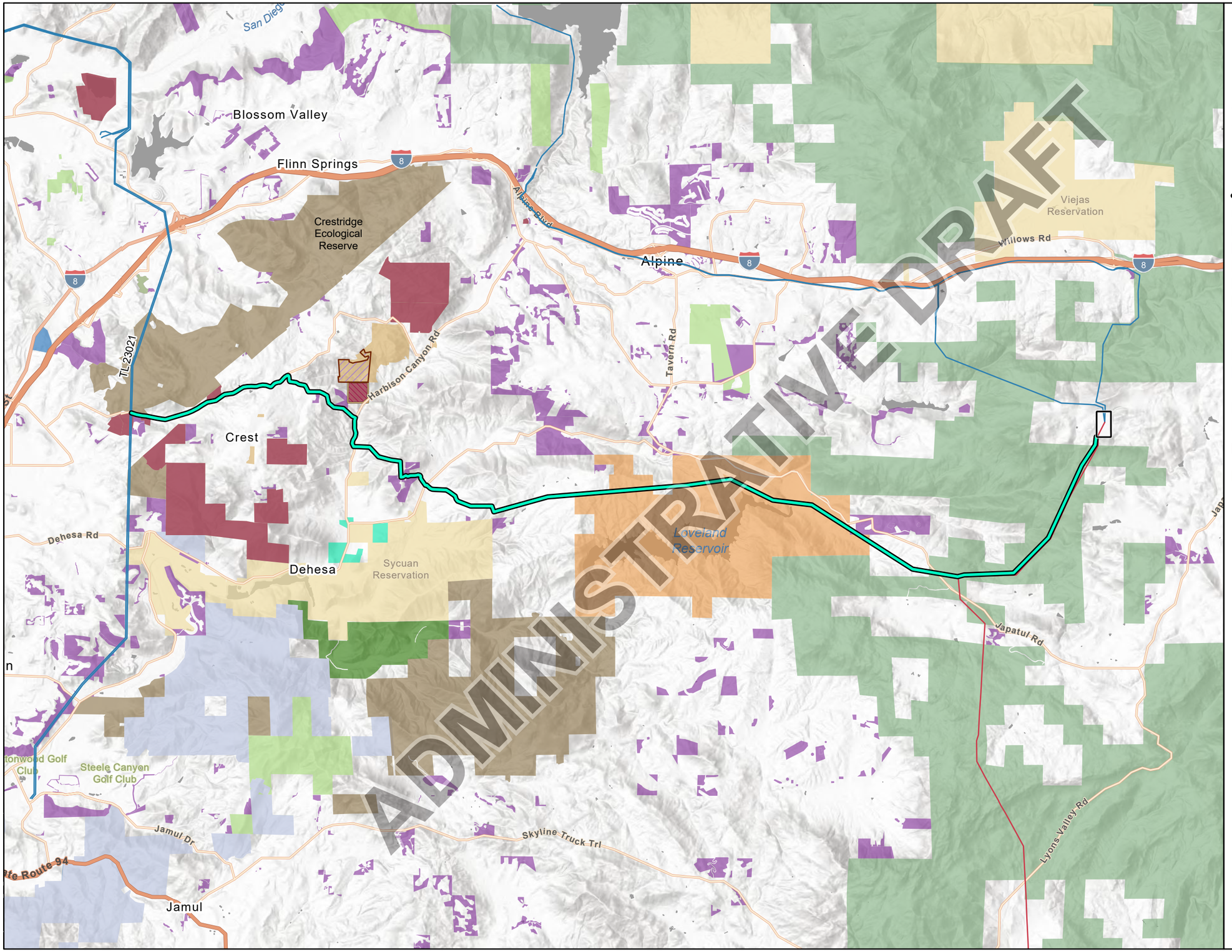

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route 3B

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route 3B

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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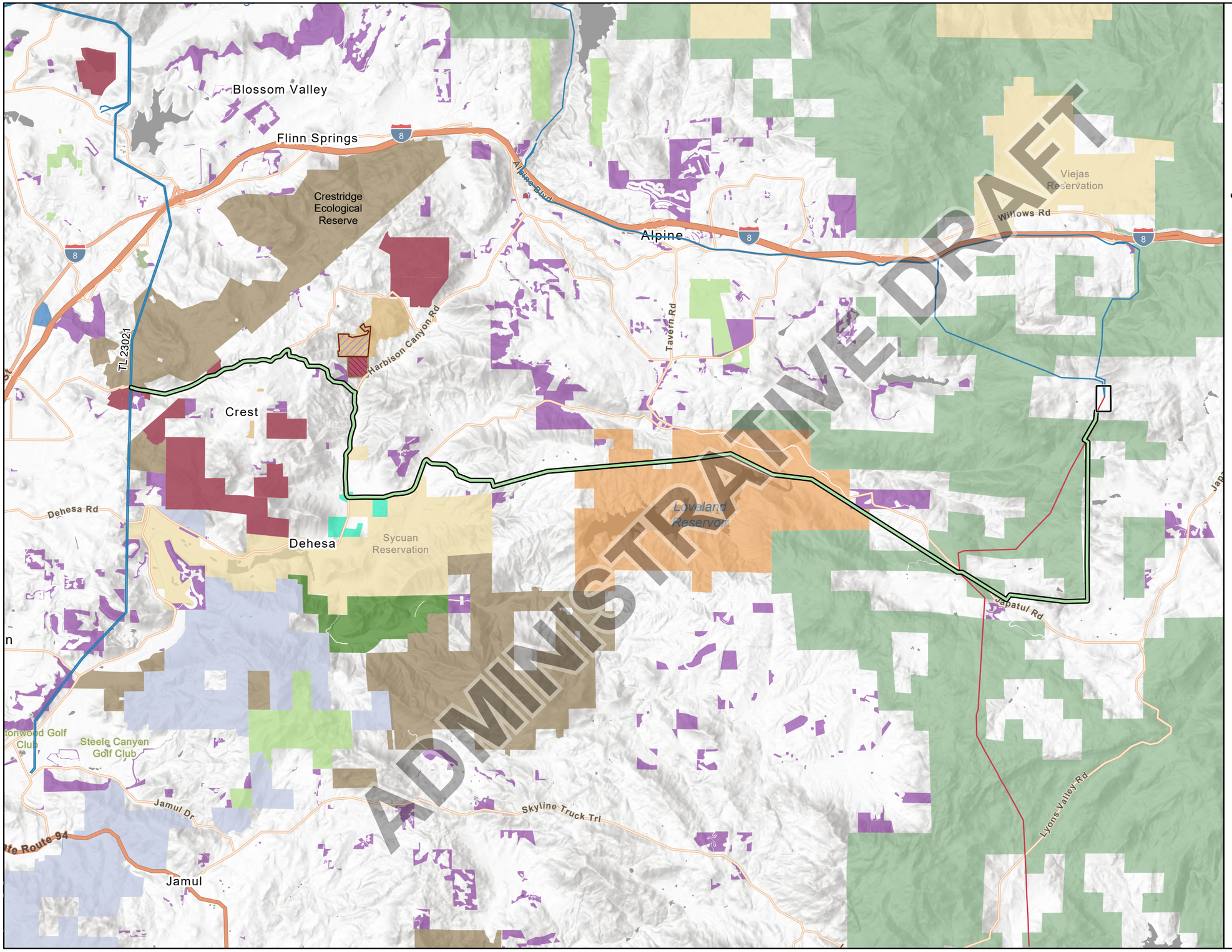

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route A

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route A

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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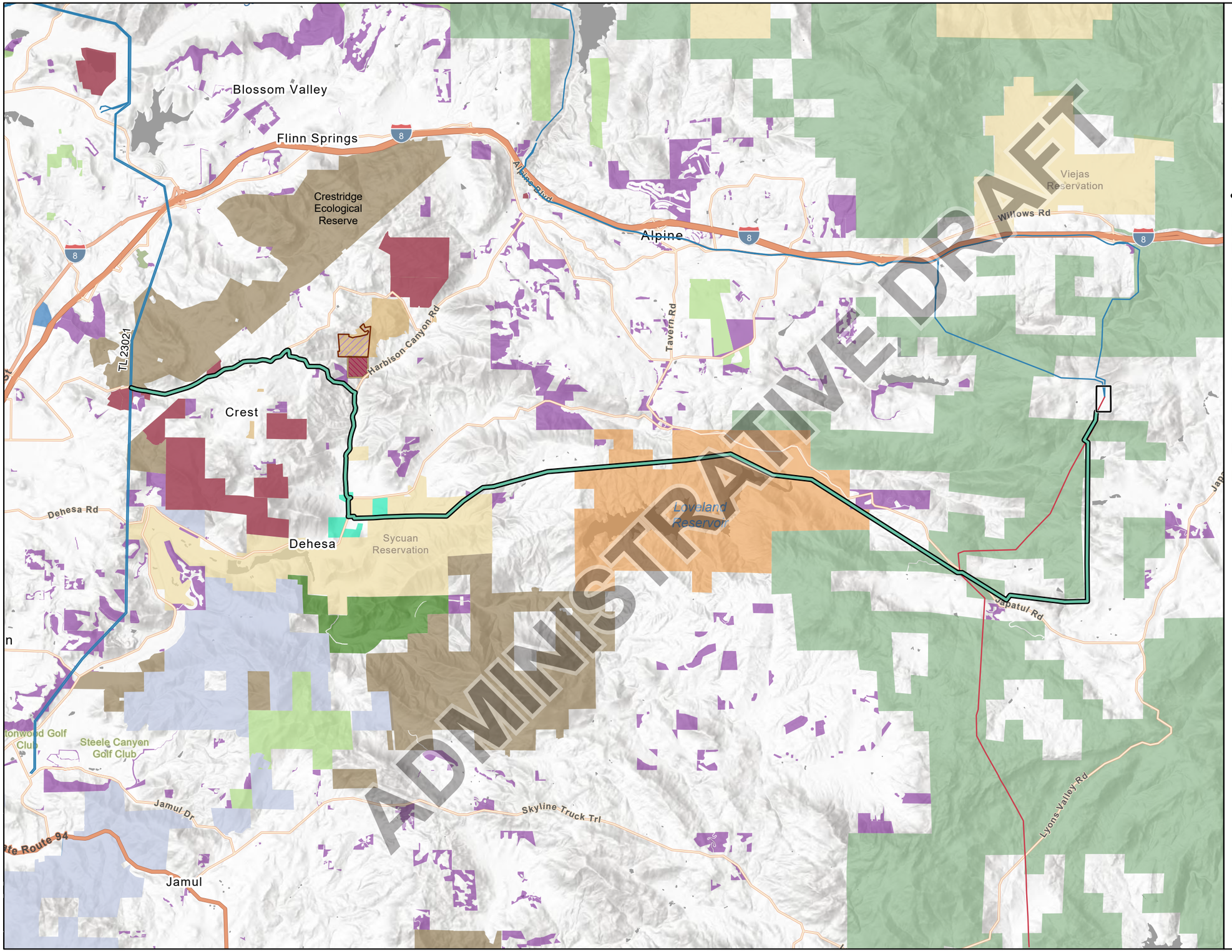

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route B

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route B

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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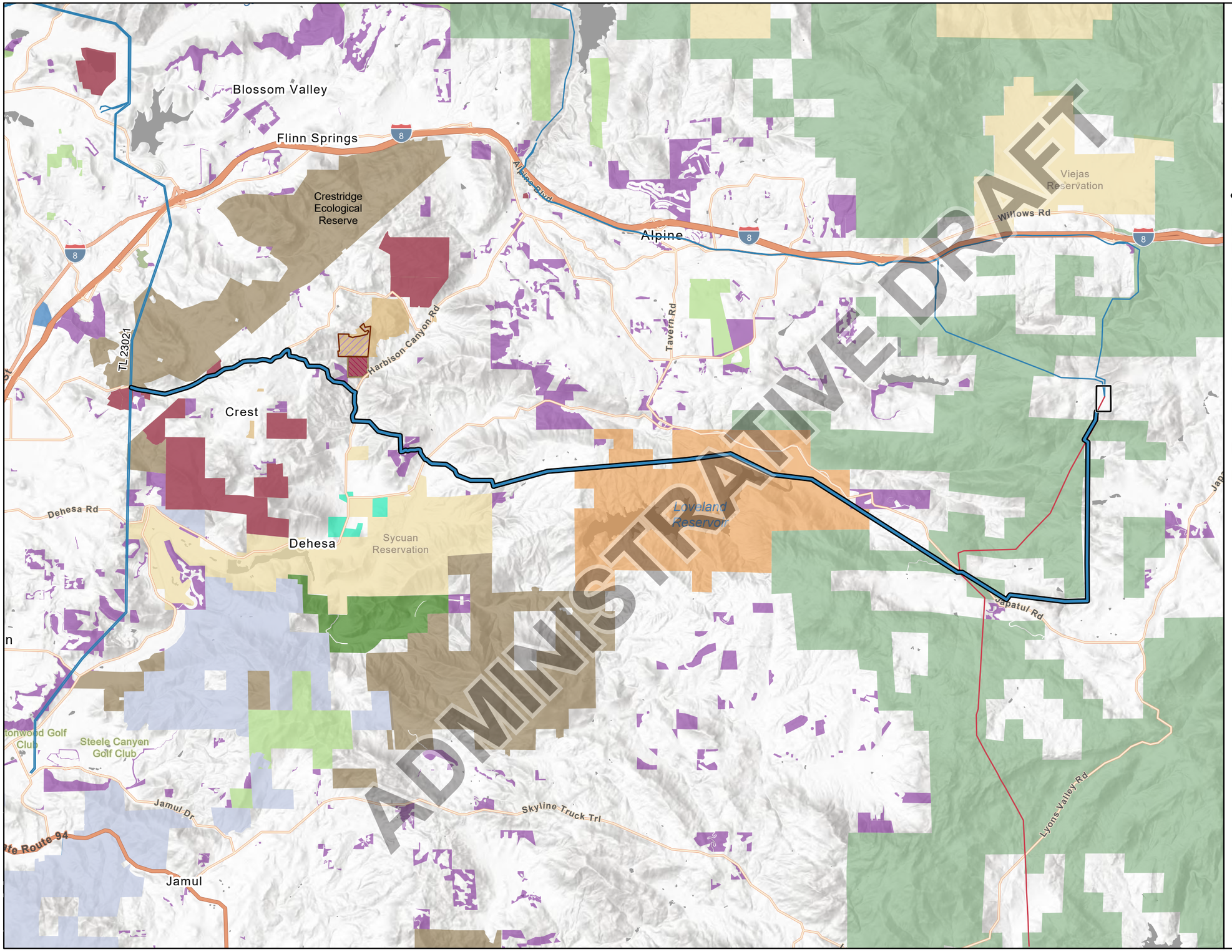

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route C

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route C

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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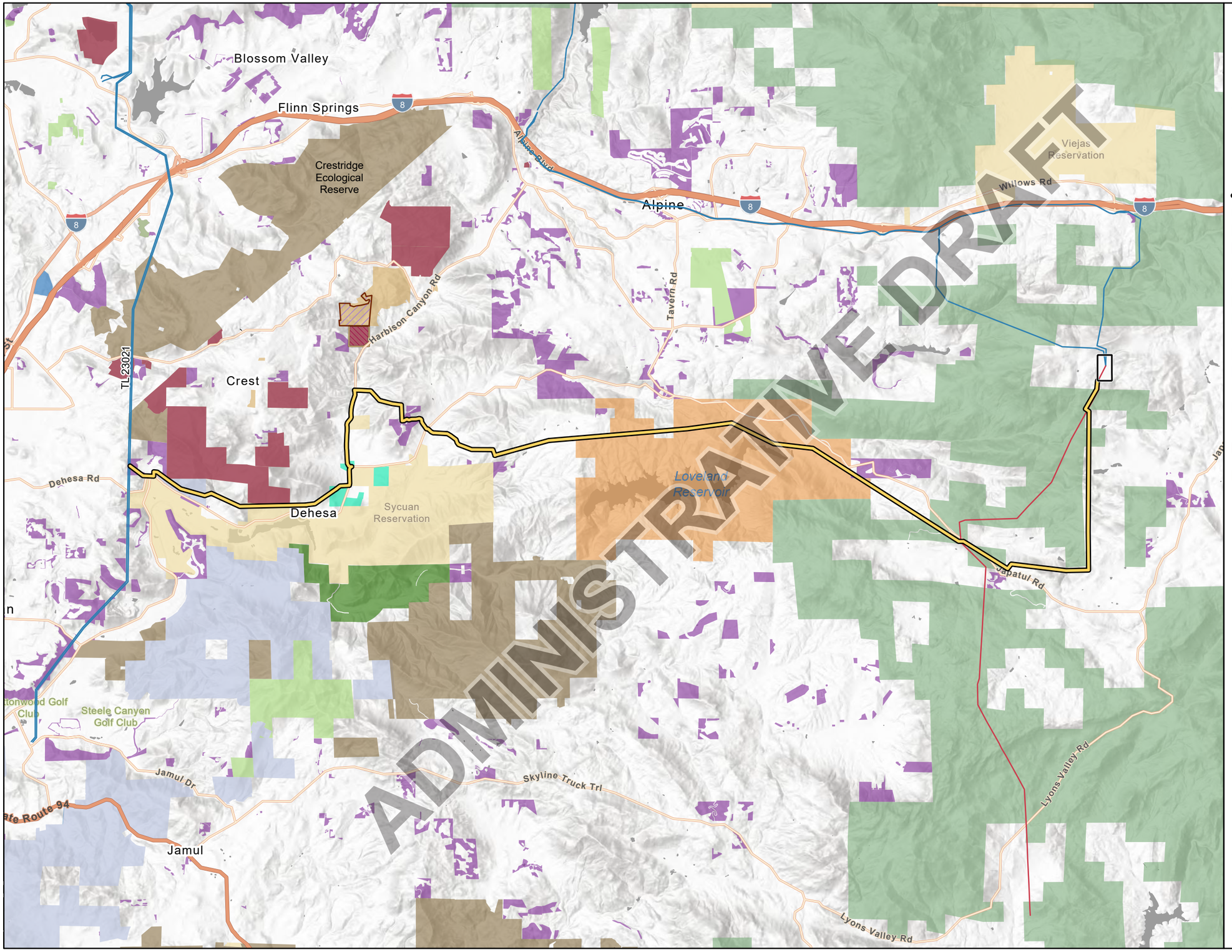

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route D

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route D

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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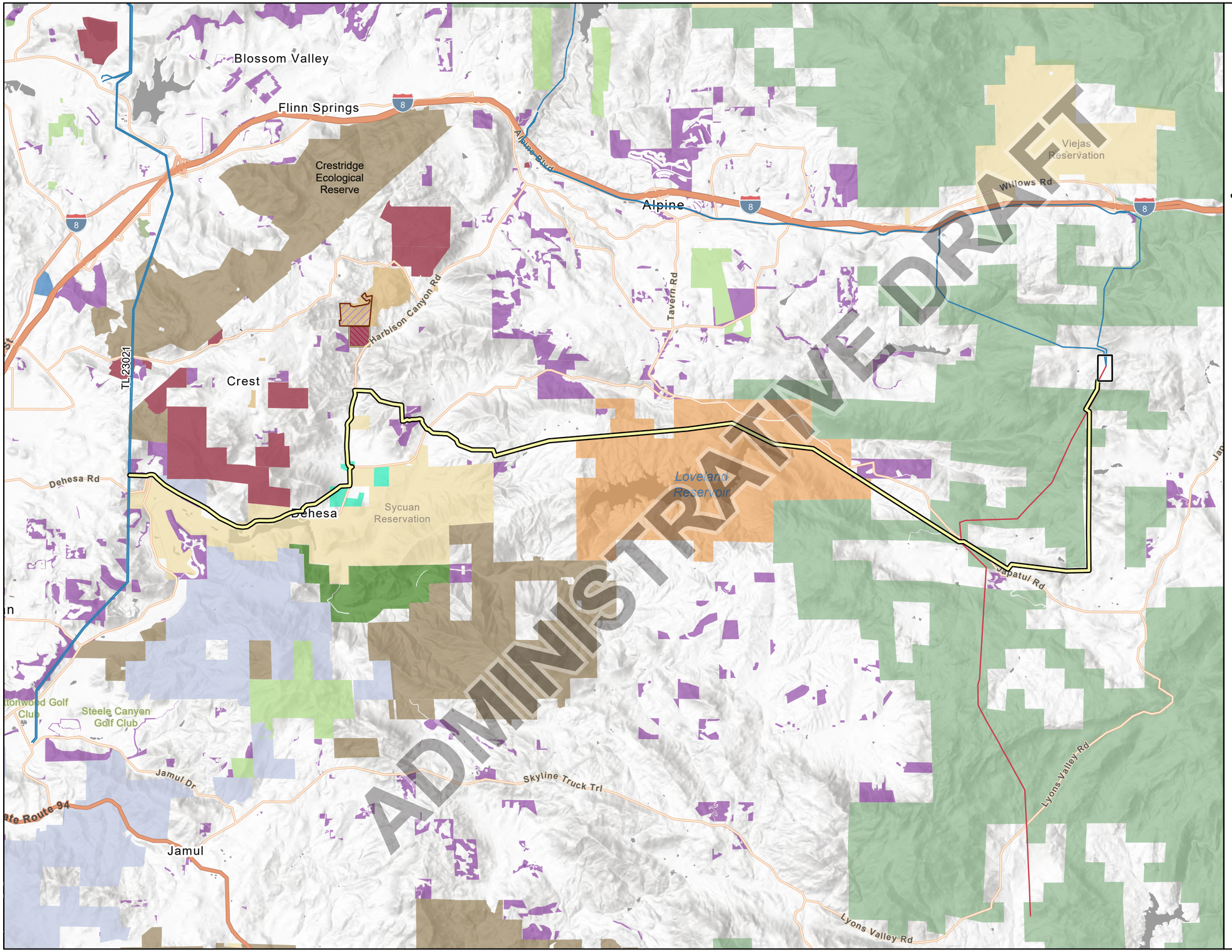

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route E

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route E

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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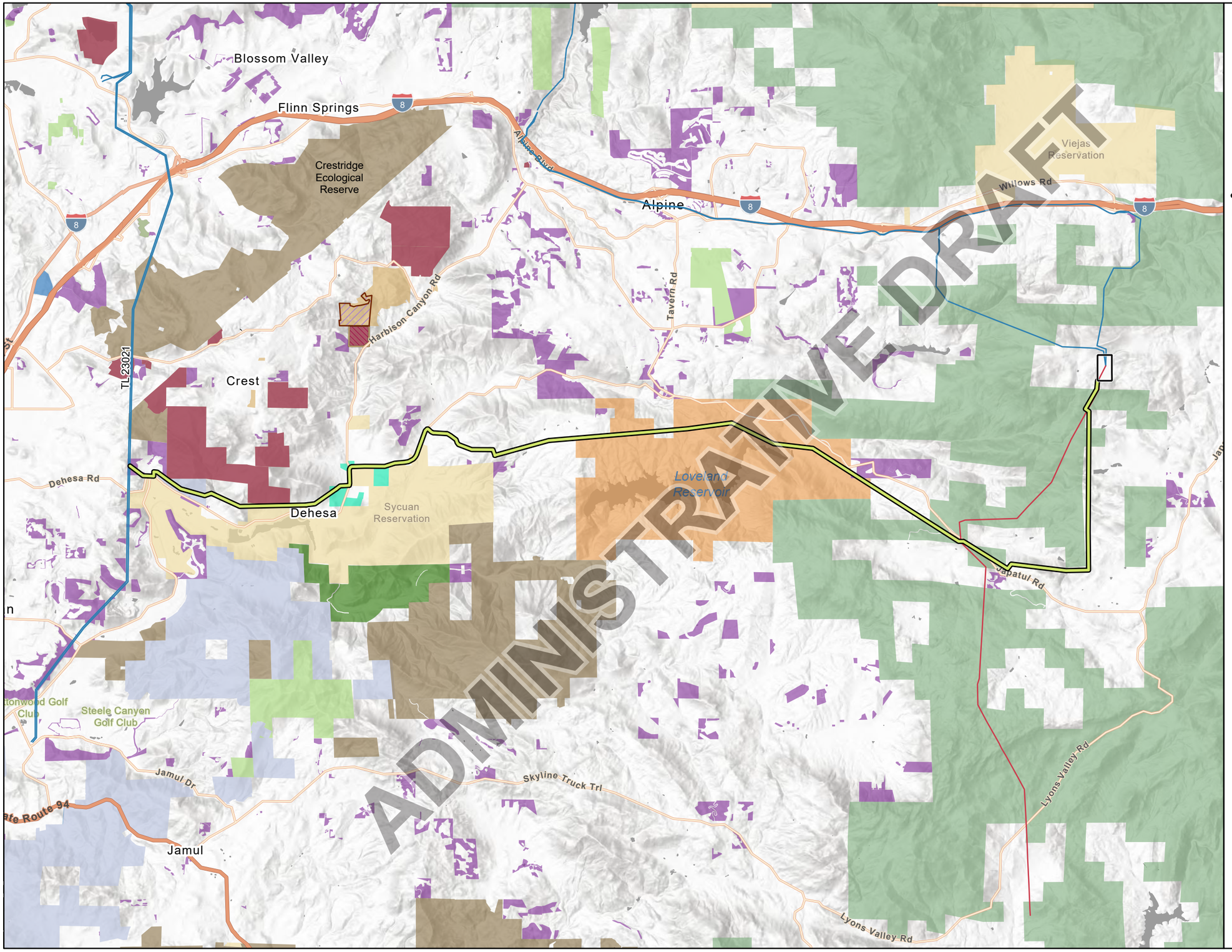

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route F

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route F

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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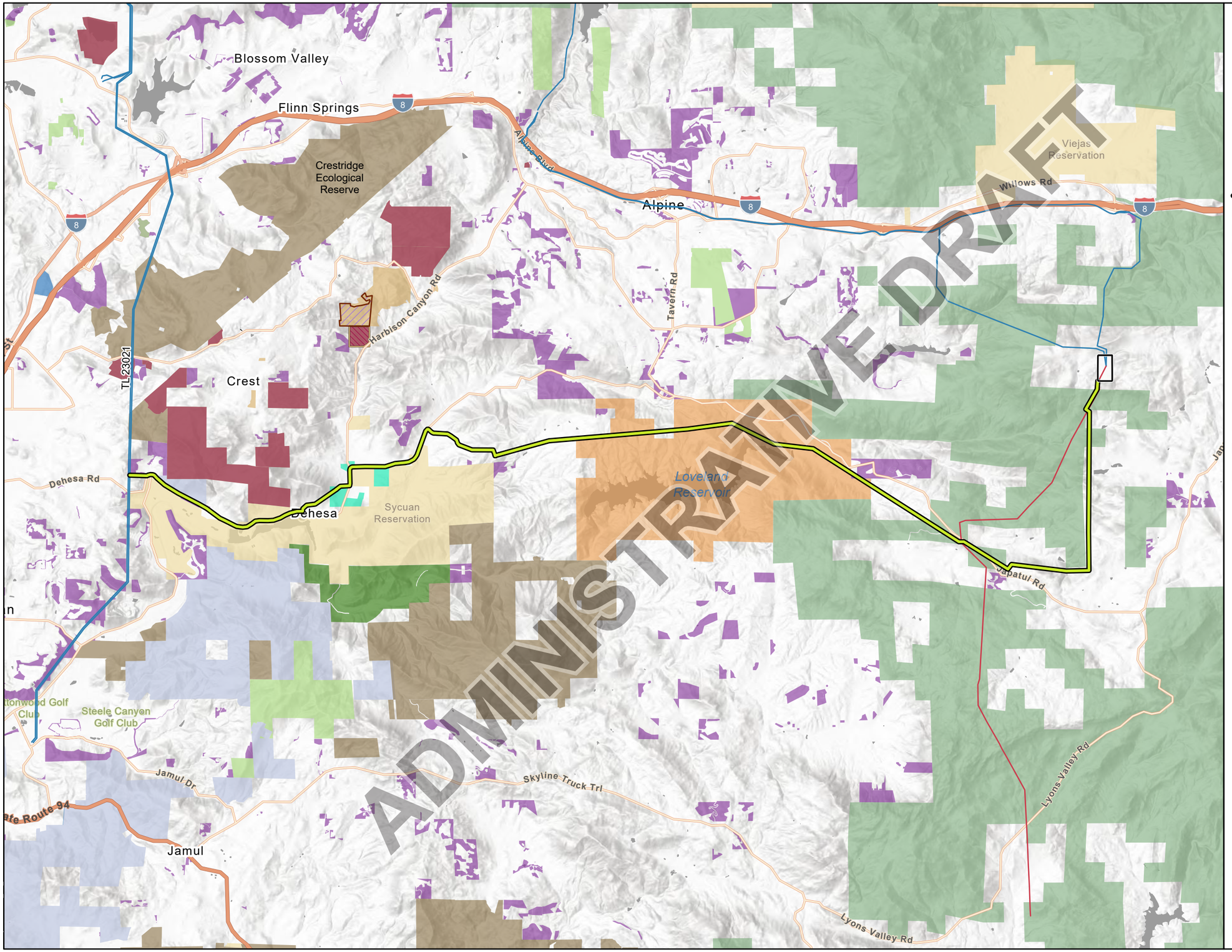

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route G

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route G

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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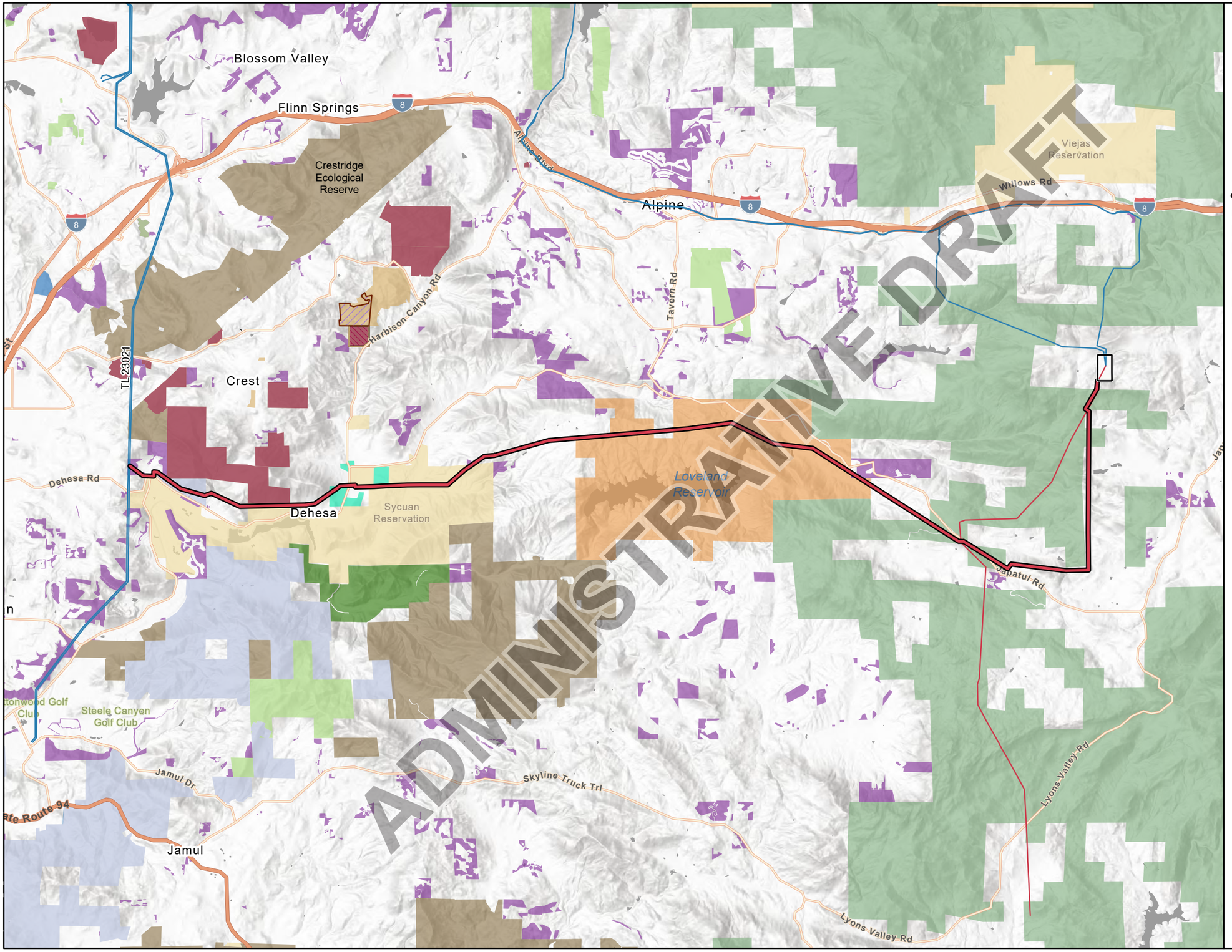

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route H

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route H

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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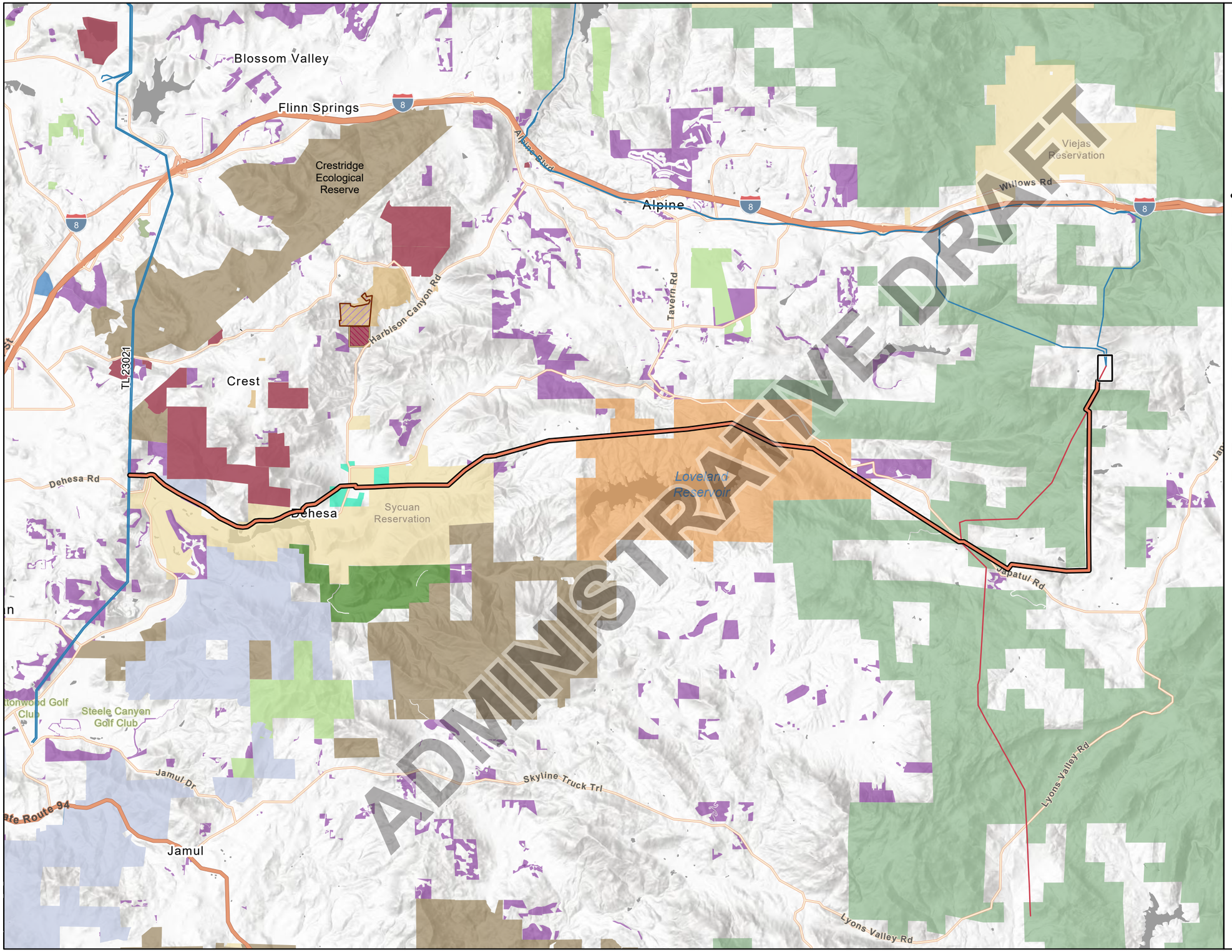

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route I

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route I

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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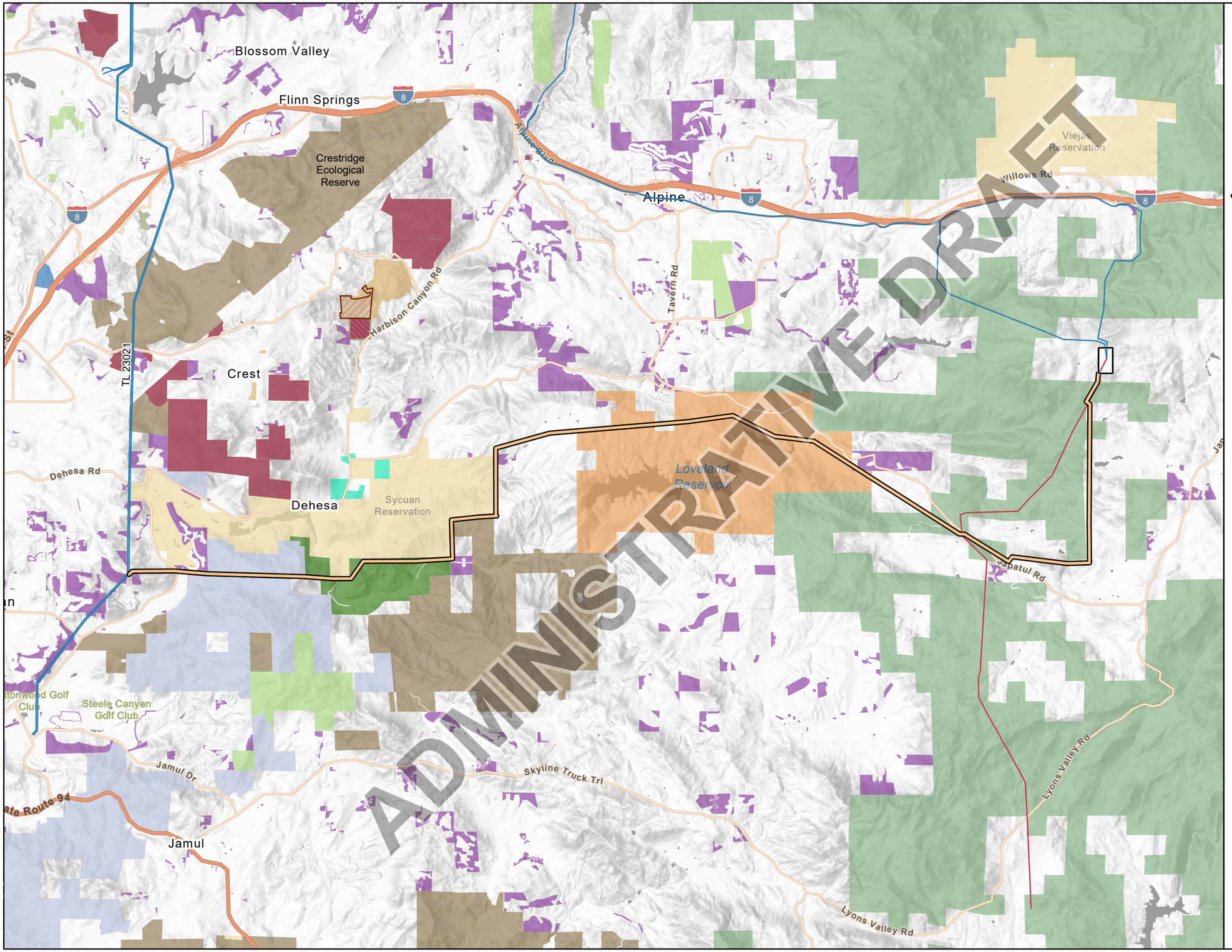

Attachment 6-B:
Alternatives Dismissed from Further Evaluation
Alternative Route J

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route J

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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ATTACHMENT 6-C: PROJECT ROUTE ALTERNATIVES

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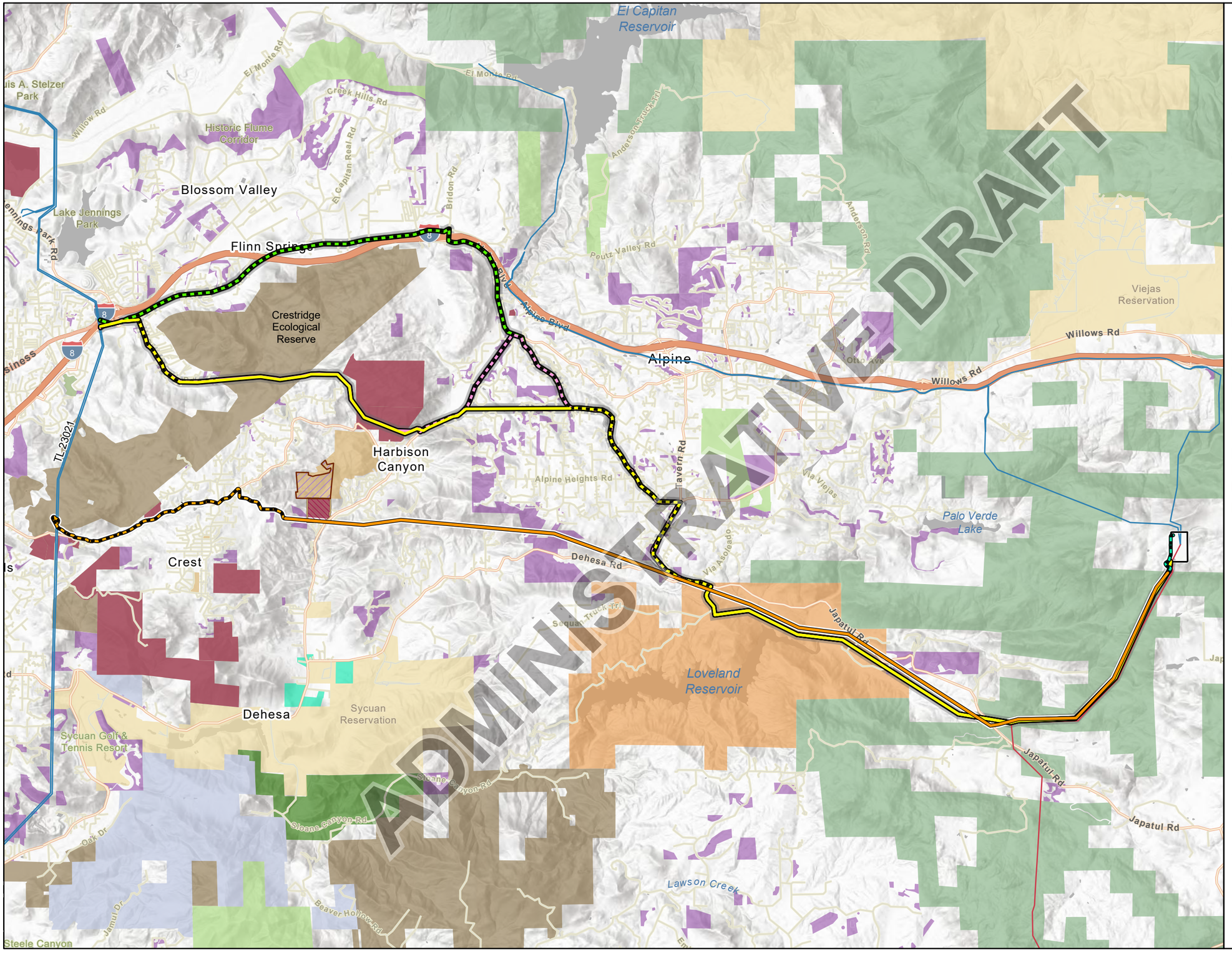

Attachment 6-C:
Project Route Alternatives Overview Map

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Proposed 230 kV OH Segment
- Proposed 230 kV Eastern UG Segment
- Proposed 230 kV Western UG Segment
- Existing Suncrest Substation

Alternative Route

- Route 4 OH Segment
- Route 4 UG Segment
- Route 4B OH Segment
- Route 4B UG Segment
- Route 5 OH Segment
- Route 5 UG Segment

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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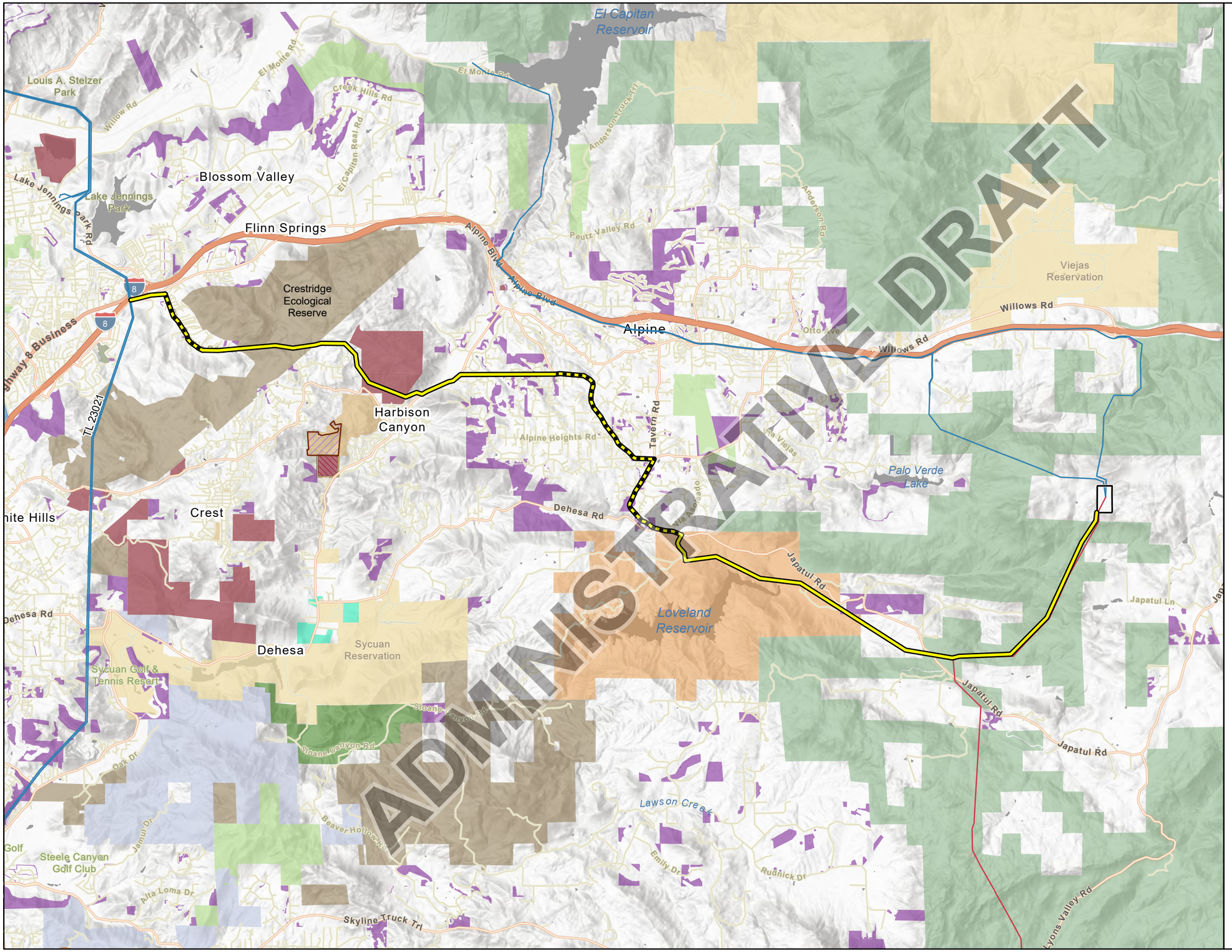

ADMINISTRATIVE DRAFT

Attachment 6-C:
Project Route Alternatives
Alternative Route 4

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route 4 OH Segment
- Route 4 UG Segment

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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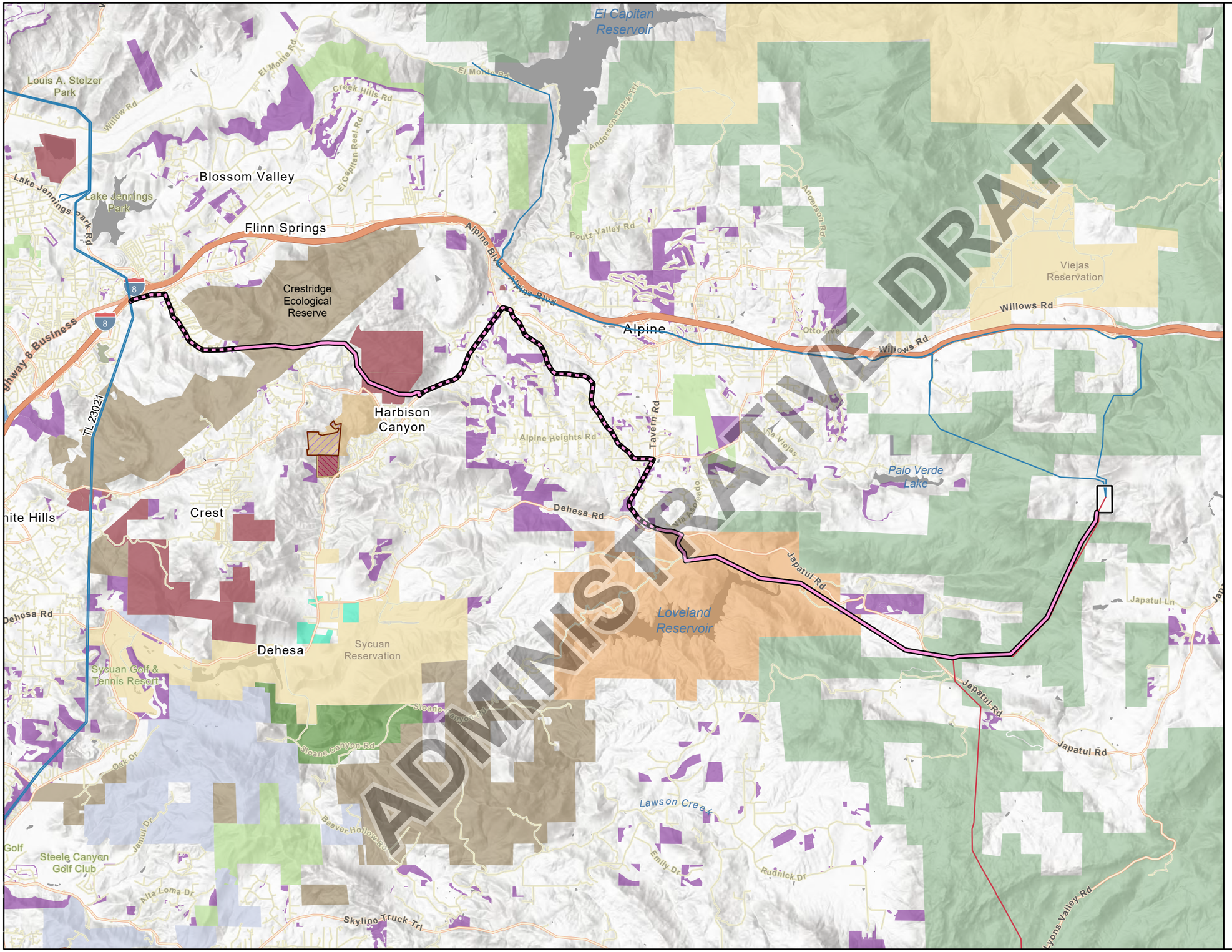

ADMINISTRATIVE DRAFT

Attachment 6-C:
Project Route Alternatives
Alternative Route 4B

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route 4B OH Segment
- Route 4B UG Segment

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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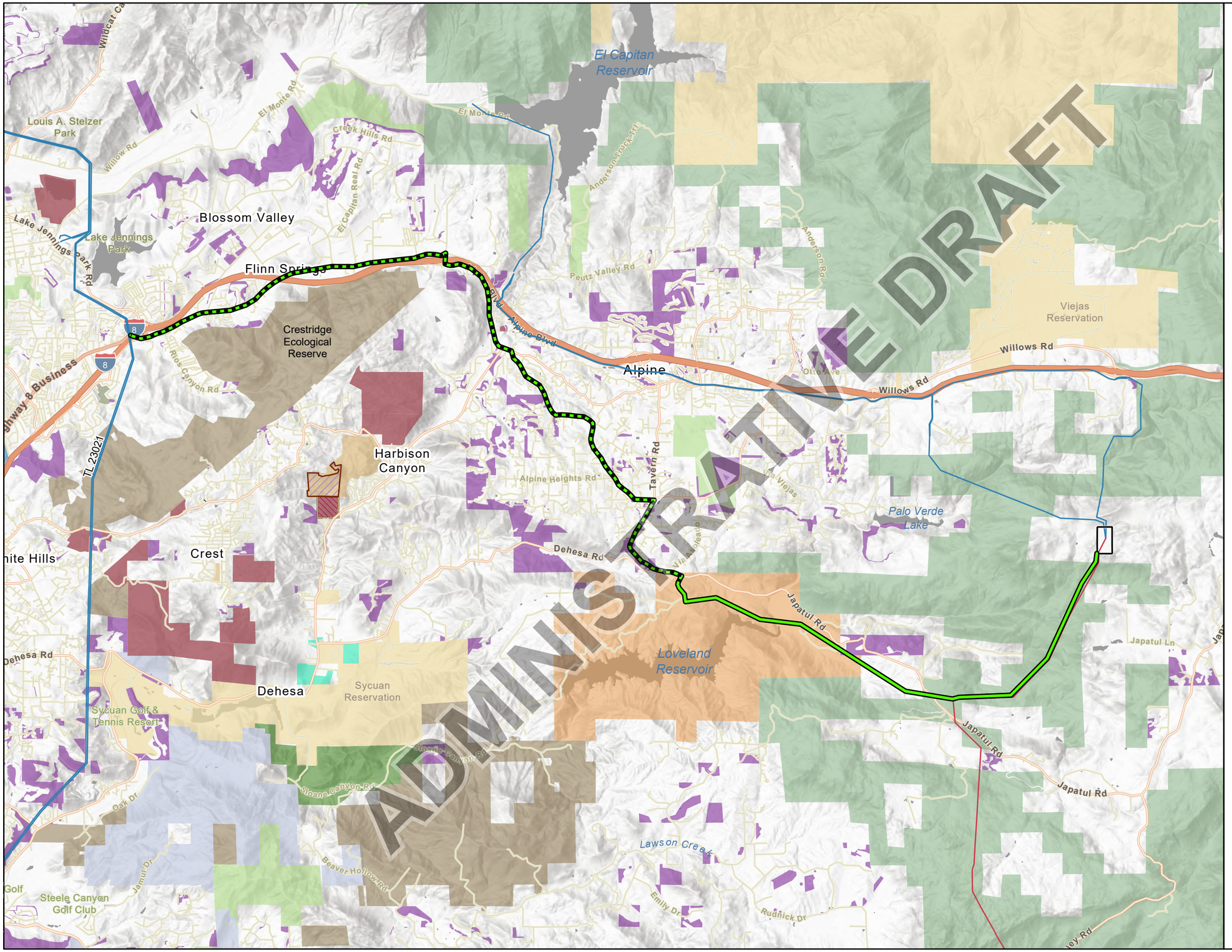
SDGE



Attachment 6-C:
Project Route Alternatives
Alternative Route 5

Suncrest
230 Kilovolt Loop-In Project

- Existing SDG&E 230 kV Transmission Line
- Existing SDG&E 500 kV Transmission Line
- Existing Suncrest Substation

Alternative Route

- Route 5 OH Segment
- Route 5 UG Segment

Landownership or Land Management

- California Department of Fish and Wildlife
- Endangered Habitats Conservancy
- Sweetwater Authority
- United States Forest Service
- Kumeyaay Diegueno Land Conservancy
- Sycuan Fee-Owned Land
- Non-Profit Conservancies and Trusts
- Other State Lands
- US Fish and Wildlife Service
- Bureau of Indian Affairs
- Private Conservation and Open Space Easement
- County of San Diego/Stoneridge Preserve
- County of San Diego/ Endangered Habitats Conservancy
- County of San Diego / Stoneridge Preserve and Private Conservation and Open Space Easement

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SDGE

CHAPTER 7 – LIST OF PREPARERS

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Chris Markham ..... Project Manager

Katie Basinski ..... Environmental Project Manager

Keely Craig ..... Senior Environmental Specialist

Shannon Foglia ..... Team Lead, Cultural Resources

INSIGNIA ENVIRONMENTAL

Anne Marie McGraw ..... Technical Review

Armen Keochekian ..... Project Management Review

Grace Sandel ..... Aesthetics; Alternatives; Cumulative Impacts; Public Services; Recreation

Grace Quigley ..... Agriculture and Forestry; Land Use and Planning

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Holly Jossart ..... Energy; Hazards and Hazardous Materials; Wildfire

Julie Roshala Moroney ..... Executive Summary; Introduction; Project Description; Other CEQA Considerations

Matthew Winter ..... Geology, Soils, and Paleontological Resources; Noise; Transportation

Kyle Rommel ..... Hazards and Hazardous Materials

Brian Nemerow ..... Hydrology and Water Quality; Mineral Resources; Population and Housing; Public Services

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Sara Hamilton ..... Technical Editing

Brad Jacobsen ..... Geographic Information System Mapping and Analysis

CALIFORNIA PUBLIC UTILITIES COMMISSION

[CPUC TO COMPLETE THIS SECTION]

ECORP CONSULTING, INC.

[CPUC TO COMPLETE THIS SECTION]