SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

June 30, 2015

Shannon Pankratz
Department of Army
Los Angeles District, U.S. Army Corps of Engineers
915 Wilshire Boulevard, Suite 930
ATTN: Regulatory Division, CESPL-RG
Los Angeles, CA 90017-3409

Re: Southern California Edison's Section 404 Nationwide Permit Application for the Mesa 500 kilovolt Substation Project – Application File Number SPL-2014-00375-SLP

Dear Ms. Pankratz:

Please find the attached application for a Section 404 Nationwide Permit (NWP) for impacts to waters of the United States (U.S.) associated with the Mesa 500 kilovolt (kV) Substation Project (Project). A request for an Approved Jurisdictional Determination (AJD) was submitted to you on April 22, 2015. Southern California Edison (SCE) appreciates the assistance that you have already provided in developing this application.

The enclosed application package includes the following:

- Completed NWP Pre-Construction Notification (PCN) Form
- Attachment A: Supplemental Information
- Attachment B: Figures, including:
    - Figure 1: Project Components Overview Map
    - Figure 2: Proposed Substation Layout
    - Figure 3: Grading Phases Areas
    - Figure 4: Impacts to Waters of the U.S.
    - Figure 5: Impacts to Waters of the U.S.: Typical Plan and Cross-Section Drawing
- Attachment C: Photographs of Impacted Water Features
- Attachment D: Protocol Surveys for Coastal California Gnatcatcher
- Attachment E: Biological Assessment
- Attachment F: Historic Properties and Cultural Resources Summary

In addition, a Biological Assessment (BA) has been prepared for the Project in accordance with legal requirements set forth under Section 7 of the federal Endangered Species Act (ESA) (16 U.S. Code 1536[c]) to address the potential effects of the Project on federally listed threatened and endangered species, designated critical habitat, and proposed/candidate species for ESA protection. A separate hard copy of the BA is enclosed to facilitate consultation with the U.S. Fish and Wildlife Service.

SCE fully appreciates the requirements set forth in Section 404 of the Clean Water Act and continues to explore practicable ways to avoid and/or minimize impacts of the Project. SCE is in the process of developing a Compensatory Mitigation Plan to ensure that adequate mitigation is provided as compensation for impacts to waters of the U.S. that would result from construction of the Project.

SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

We appreciate your review and input to this point, and look forward to continuing to work with you on permitting the Project. Should you have any questions about the enclosed, please do not hesitate to contact me at (626) 404-4048.

Sincerely,

Richard Haywood
Senior Regulatory Specialist
Southern California Edison
1218 South 5th Avenue
Monrovia, CA 91016
(626) 404-4048
Richard.haywood@sce.com

SOUTHERN CALIFORNIA EDISON COMPANY

MESA 500 KILOVOLT SUBSTATION PROJECT
SECTION 404 NATIONWIDE PERMIT APPLICATION

Prepared for:

Prepared by:

SOUTHERN CALIFORNIA EDISON®
An *EDISON INTERNATIONAL*® Company

June 2015

U.S. Army Corps of Engineers

South Pacific Division

Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the U.S. Army Corps of Engineers Nationwide Permit Program within the South Pacific Division (SPD), including General and Regional Conditions. You MUST fill out all boxes related to the work being done. Fillable boxes in this form expand if additional space is needed.

Box 1 Project Name Mesa 500 kilovolt (kV) Substation Project (Project) [SPL-2014-00375-SLP]			
Applicant Name Hazem Gabr		**Applicant Title** Manager, Water Quality Section Corporate Environmental Health and Safety	
Applicant Company, Agency, etc. Southern California Edison Company (SCE)		Applicant's internal tracking number (if any) Not Applicable (N/A)	
Mailing Address 1218 South 5th Avenue Monrovia, CA 91016			
Work Phone with area code (626) 462-8715	Mobile Phone with area code	Home Phone with area code	Fax # with area code
E-mail Address Hazem.gabr@sce.com	Relationship of applicant to property: ☒ Owner ☐ Purchaser ☐ Lessee ☐ Other:		
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a U.S. Army Corps of Engineers Nationwide Permit or Permits as described herein. I certify that I am familiar with the information contained in this application and, that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work only after all necessary permits have been received and to comply with all terms and conditions of the authorization.			
Signature of applicant H. Gabr			Date (mm/dd/yyyy) 6/29/2015

If anyone other than the person named as the Applicant will be in contact with the U.S. Army Corps of Engineers representing the Applicant regarding this project during the permit process, Box 2 MUST be filled out.

Box 2 Authorized Agent/Operator Name Richard Haywood		**Agent/Operator Title** Senior Regulatory Wetlands Specialist	
Agent/Operator Company, Agency, etc. SCE		E-mail Address Richard.haywood@sce.com	
Mailing Address 1218 South 5th Avenue Monrovia, CA 91016			
Work Phone with area code (626)462-8632	Mobile Phone with area code (626) 404-4048	Home Phone with area code	Fax # with area code
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
Signature of applicant R. Gabr			Date (mm/dd/yyyy) 6/29/2015
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and			

Revised April 12, 2012. For the most recent version of this form, visit your Corps District's Regulatory website.

belief, such information is true, complete, and accurate.	
Signature of authorized agent Richard Hayward	Date (mm/dd/yyyy) 6/29/2015

Box 3 Name of Property Owner(s), if other than Applicant: The Project is located entirely within SCE fee-owned property and rights-of-way.		
Owner Title N/A	**Owner Company, Agency, etc.** N/A	
Mailing Address N/A		
Work Phone with area code N/A	Mobile Phone with area code N/A	Home Phone with area code N/A

Box 4 Name of Contractor(s) (if known): To Be Determined (TBD)		
Contractor Title TBD	**Contractor Company, Agency, etc.** TBD	
Mailing Address TBD		
Work Phone with area code TBD	Mobile Phone with area code TBD	Home Phone with area code

Box 5 Site Number 1 of 1. Project location(s), including street address, city, county, state, zip code where proposed activity will occur:

The Project is located in Los Angeles County, California in the cities of Monterey Park, Montebello, Rosemead, South El Monte, Commerce, Bell Gardens, and Pasadena, as well as in unincorporated Los Angeles County. The vast majority of Project activities—consisting of the construction of the 500/220/66/16 kV Mesa Substation and associated transmission, subtransmission, distribution, and telecommunications lines—will be located in the City of Monterey Park. The Mesa Substation site is located south of Potrero Grande Drive, west of Greenwood Avenue, east of East Markland Drive, and north of State Route 60. Figure 1: Project Components Overview Map in Attachment B: Figures depicts the location of the Project.

A total of eight potential United States (U.S.) Army Corps of Engineers (USACE)-jurisdictional waters, including one intermittent drainage (Rio Hondo) and seven ephemeral drainages, were mapped within the Project area. Attachment A: Supplemental Information provides the locations of these waters.

Name of Waterbody(ies) (if known, otherwise enter "an unnamed tributary to"): Rio Hondo and 7 unnamed tributaries to the Los Angeles River	
Latitude & Longitude (D/M/S, DD, or UTM with Zone): See Table 1: Project Location Information in Attachment A: Supplemental Information.	Section, Township, Range: None (Land Grant)
County Assessor Parcel Number (Include County name): See Table 1: Project Location Information in Attachment A: Supplemental Information.	USGS Quadrangle map name: See Table 1: Project Location Information in Attachment A: Supplemental Information
Watershed (HUC and watershed name[1]): HUC 18070105, Los Angeles-San Gabriel Hydrologic Unit / Los Angeles River Watershed [1]http://water.usgs.gov/GIS/regions.html	Size of permit area or project boundary: 202.12 acres N/A linear feet

Directions to the project location and other location descriptions, if known:
The Mesa Substation site can be accessed from Interstate 5. Exit on Telegraph Road, turn left on Telegraph Road, turn right on Garfield Avenue, turn right on Via Campo, turn left on East Markland Drive, and turn right on Potrero Grande Drive. Continue approximately 0.5 mile on Potrero Grande Drive, and Mesa Substation is on the right.

Figure 1: Project Components Overview Map in Attachment B: Figures depicts the location of the Project.

Access limitations or restrictions (if any): All site visits will need to be coordinated with SCE. Please contact Richard Haywood to coordinate site visits.

Box 6 Nature of Activity (Description of the project, include all features):

The Project consists of the following main components: 1) construction of the proposed Mesa Substation and demolition of the existing Mesa Substation within the City of Monterey Park; 2) removal, relocation, modification and/or construction of transmission, subtransmission, distribution, and telecommunications structures within the cities of Monterey Park, Montebello, Rosemead, South El Monte, and Commerce, and in portions of unincorporated Los Angeles County; 3) conversion of an existing source line from overhead to underground between three street lights on Loveland Street within the City of Bell Gardens; and 4) installation of a temporary 220 kV line loop-in at Goodrich Substation within the City of Pasadena.

Further details regarding the components to be constructed are provided in Attachment A: Supplemental Information.

Project Purpose (Description of the reason or purpose of the project):

The Project is being proposed to meet the following fundamental objectives: 1) provide safe and reliable electrical service; 2) address reliability concerns resulting from the recent retirement of San Onofre Nuclear Generating Station and from Once Through Cooling shutdowns expected by December 31, 2020; 3) allow greater flexibility in the siting of future generation projects to meet local reliability needs in the Western Los Angeles Basin, while reducing the total amount of new generation required by providing additional transmission import capability; 4) maintain or improve system reliability within the Electrical Needs Area; 5) comply with all applicable reliability planning criteria required by the North American Electric Reliability Corporation, the Western Electricity Coordinating Council, and California Independent System Operator.

Additional details regarding the purpose of the Project are provided in Attachment A: Supplemental Information.

Reason(s) for Discharge into Waters of the United States (Description of why dredged and/or fill material needs to be placed in Waters of the United States):
Construction of Mesa Substation will result in permanent fill and temporary disturbance of jurisdictional waters of the U.S. Project activities that will result in fill include site grading, ground surface improvements, below-grade construction, above-grade construction, distribution getaway construction, and telecommunications equipment installation.

Proposed discharge of dredge and/or fill material. Indicate total surface area in **acres** and **linear feet** (where appropriate) of the proposed impacts to Waters of the United States, indicate water body type (tidal wetland, non-tidal wetland, vernal pool, riparian wetland, ephemeral stream/river, intermittent stream/river, perennial stream/river, pond/lake, vegetated shallows, bay/harbor, lagoon, ocean, etc.), and identify the impact(s) as permanent and/or temporary for each requested Nationwide Permit[1]:

[1] Enter the intended permit number(s). See Nationwide Permit regulations for permit numbers and qualification information: http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/NationwidePermits.aspx

Water Body Type	**Requested NWP Number:** 12				**Requested NWP Number:**				**Requested NWP Number:**			
	Permanent		Temporary		Permanent		Temporary		Permanent		Temporary	
	Area	Length	Area	Length	Area	Length	Area	Length	Area	Length	Area	Length
Ephemeral Drainage	0.37	6,294.49	0.09	1,352.52								
Total:	0.37	6,294.49	0.09	1,352.52								

Table 3: USACE-Jurisdictional Resources and Impacts in Attachment A: Supplemental Information summarizes the Project's impacts to USACE-jurisdictional waters.

Total volume (in cubic yards) and type(s) of material proposed to be dredged from or discharged into Waters of the United States:

Material Type	Total Volume Dredged	Total Volume Discharged
Rock Slope Protection (RSP)		
Clean spawning gravel		
River rock		
Soil/Dirt/Silt/Sand/Mud		122.49 cubic yards
Concrete		
Structure		
Stumps/Root wads		
Other:		
Total:		

Table 3: USACE-Jurisdictional Resources and Impacts in Attachment A: Supplemental Information summarizes the approximate fill volume to be discharged to USACE-jurisdictional waters.

Activity requires a written waiver to exceed specified limits of the Nationwide Permit? ☐ Yes ☒ No
If yes, provide Nationwide Permit number and name, limit to be exceeded, and rationale for each requested waiver:
N/A

Activity will result in the loss of greater than ½-acre of Waters of the United States? ☐ Yes ☒ No
If yes, provide an electronic copy (compact disc) or multiple hard copies (7) of the complete PCN for appropriate Federal and State Pre-discharge Notification (See General Condition #31, Pre-construction Notification, Agency Coordination, Section 2 and 4):
N/A

Describe direct and indirect effects caused by the activity (General Condition #31, District Engineer's Decision): A discussion of the Project's direct and indirect effects is provided in Attachment A: Supplemental Information.

Potential cumulative impacts of proposed activity (if any): A discussion of the Project's potential cumulative impacts is provided in Attachment A: Supplemental Information.

Drawings and figures (see each U.S. Army Corps of Engineers District's Minimum Standards Guidance): See Attachment B: Figures; See Attachment C: Photographs.

Vicinity map: ☒ Attached (or mail copy separately if applying electronically)

To-scale Plan view drawing(s): ☒ Attached (or mail copy separately if applying electronically)

To-scale elevation and/or Cross Section drawing(s): ☒ Attached (or mail copy separately if applying electronically)

Numbered and dated pre-project color photographs: ☒ Attached (or mail copy separately if applying electronically)

Sketch drawing(s) or map(s): ☒ Attached (or mail copy separately if applying electronically)

Has a wetlands/waters of the U.S. delineation been completed?

☒ Yes, Attached[2] (or mail copy separately if applying electronically) ☐ No

A Request for an Approved Jurisdictional Determination (AJD) was submitted to the USACE on April 22, 2015. The AJD presents the results of the delineation of potential waters of the U.S. within the Project area.

If a delineation has been completed, has it been verified in writing by the Corps?

☐ Yes, Date of preliminary or approved jurisdictional determination (mm/dd/yyyy): N/A Corps file number: SPL-2014-00375-SLP

☒ No

[2]If available, provide ESRI shapefiles (NAD83) for delineated waters

For proposed discharges of dredged material resulting from navigation dredging into inland or near-shore waters of the U.S. (including beach nourishment), please attach[3] a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available), or if disposed offshore, a proposed SAP prepared according to the Ocean Disposal Manual.

[3]Or mail copy separately if applying electronically

Is any portion of the work already complete? ☐ YES ☒ NO

If yes, describe the work: N/A

Box 7 Authority:

Is Section 10 of the Rivers and Harbors Act applicable?: ☐ YES ☒ NO

Is Section 404 of the Clean Water Act applicable?: ☒ YES ☐ NO

Is the project located on U.S. Army Corps of Engineers property or easement?: ☒ YES ☐ NO

A small portion of the Project (proposed telecommunications line) crosses through USACE-owned property (Whittier Narrows).

If yes, has Section 408 process been initiated?: ☐ YES ☒ NO

Would the project affect a U.S. Army Corps of Engineers structure?: ☒ YES ☐ NO

If yes, has Section 408 process been initiated?: ☐ YES ☒ NO

Is the project located on other Federal Lands (USFS, BLM, etc.)?: ☐ YES ☒ NO

Is the project located on Tribal Lands?: ☐ YES ☒ NO

Box 8 Is the discharge of fill or dredged material for which Section 10/404 authorization is sought part of a larger plan of development?: ☐ YES ☒ NO

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):
N/A

Location of larger development (if discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail of the entire project site should be included):
N/A

Box 9 Measures taken to avoid and minimize impacts to waters of the United States:
A description of measures taken to avoid and minimize impacts to waters of the U.S. is provided in Attachment A: Supplemental Information.

Box 10 Proposed Compensatory Mitigation related to fill/excavation and dredge activities. Indicate in **acres** and **linear feet** (where appropriate) the total quantity of Waters of the United States proposed to be created, restored, enhanced and/or preserved for purposes of providing compensatory mitigation. Indicate water body type (tidal wetland, non-tidal wetland, vernal pool, riparian wetland, ephemeral stream/river, intermittent stream/river, perennial stream/river, pond/lake, vegetated shallows, bay/harbor, lagoon, ocean, etc.) or non-jurisdictional (uplands[1]). Indicate mitigation type (permittee-responsible on-site/off-site, mitigation bank, or in-lieu fee program). If the mitigation is purchase of credits from a mitigation bank, indicate the bank to be used, if known:
[1] For uplands, please indicate if designed as an upland buffer.

SCE in the process of evaluating the method of compensation, which could include restoration, establishment, and/or enhancement. SCE will develop a Compensatory Mitigation Plan to mitigate for permanent impacts resulting from construction of the Project. Permanent impacts to all jurisdictional water resources would be compensated at a 1-to-1 ratio, or as determined by the USACE.

Site Number	Water Body Type	Created		Restored		Enhanced		Preserved		Mitigation Type
		Area	Length	Area	Length	Area	Length	Area	Length	
Total:										

If no mitigation is proposed, provide detailed explanation of why no mitigation would be necessary:
N/A

If permittee-responsible mitigation is proposed, provide justification for not utilizing a Corps-approved mitigation bank or in-lieu fee program:
N/A

Has a draft/conceptual mitigation plan been prepared in accordance with the April 10, 2008, Final Mitigation Rule[2] and District Guidelines[3,4,5]?

[2]http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/mitig_info.aspx
[3]**Sacramento and San Francisco Districts**-http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/pdf/Mitigation_Monitoring_Guidelines.pdf
[4]**Los Angeles District**-http://www.spl.usace.army.mil/Missions/Regulatory.aspx
[5]**Albuquerque District**-http://www.spa.usace.army.mil/reg/mitigation/SPA%20Final%20Mitigation%20Guidelines_OLD.pdf

☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No

If no, a mitigation plan must be prepared and submitted, if applicable.

SCE in the process of evaluating the method of compensation, including restoration, establishment, enhancement, and/or preservation.

Mitigation site(s) Latitude & Longitude (D/M/S, DD, or UTM with Zone): TBD	USGS Quadrangle map name(s): TBD
Assessor Parcel Number(s): TBD	Section(s), Township(s), Range(s): TBD
Other location descriptions, if known: TBD	
Directions to the mitigation location(s): TBD	

Box 11 Threatened or Endangered Species and Essential Fish Habitat

Please list any federally-listed (or proposed) threatened or endangered species or critical habitat (or proposed critical habitat) within the project area (include scientific names (e.g., Genus species), if known):

A discussion of federally threatened and endangered species within the Project area is provided in Attachment A: Supplemental Information.

Have surveys, using U.S. Fish and Wildlife Service/NOAA Fisheries protocols, been conducted? See Attachment D: USFWS Protocol-Level Surveys for California Coastal Gnatcatcher.

☒ Yes, Report attached (or mail copy separately if applying electronically) ☐ No

Has a biological assessment or evaluation been completed for the proposed project? See Attachment E: Biological Assessment

☒ Yes, Report attached (or mail copy separately if applying electronically) ☐ Not attached

Has Section 7 consultation been initiated by another federal agency?

☐ Yes, Initiation letter attached (or mail copy separately if applying electronically) ☒ No

Has Section 10 consultation been initiated for the proposed project?

☐ Yes, Initiation letter attached (or mail copy separately if applying electronically) ☒ No

Has the USFWS/NOAA Fisheries issued a Biological Opinion?

☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No

If yes, list date Opinion was issued (m/d/yyyy): N/A

Is the project located within Essential Fish Habitat[1] (EFH)? ☐ Yes ☒ No

[1]http://swr.nmfs.noaa.gov/hcd/HCD_webContent/EFH/index_EFH.htm

Box 12 Historic Properties and Cultural Resources:

Are any cultural resources of any type known to exist on-site? ☐ Yes ☒ No

Please list any known historic properties listed, or eligible for listing, on the National Register of Historic Places:

A discussion of historic properties and cultural resources within the Project area is provided in Attachment F: Historic Properties and Cultural Resources Summary.

Has a cultural resource records search been conducted? See Attachment F: Historic Properties and Cultural Resources.
☒ Yes, Report attached (or mail copy separately if applying electronically) ☐ No

Has a cultural resource pedestrian survey been conducted for the site?
☒ Yes, Report attached (or mail copy separately if applying electronically) ☐ No

Has another federal agency been designated the lead federal agency for Section 106 consultation?
☐ Yes, Designation letter/email attached (or mail copy separately if applying electronically) ☒ No

Has Section 106 consultation been initiated by another federal agency?
☐ Yes, Initiation letter attached (or mail copy separately if applying electronically) ☒ No

Has a Section 106 MOA or PA been signed by another federal agency and the SHPO?
☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No
If yes, list date MOA or PA was signed (m/d/yyyy): N/A

Box 13 Section 401 Water Quality Certification:
Applying for certification? ☒ Yes, Attached (or mail copy separately if applying electronically) ☐ No
☐ Not applicable (projects proposed for authorization under RHA Section 10 only)
SCE will be required to obtain a Water Quality Certification pursuant to Section 401 of the Clean Water Act from the Los Angeles Regional Water Quality Control Board (RWQCB). At this time, SCE has not submitted an application to the Los Angeles RWQCB. SCE anticipates the 401 Water Quality Certification application to be submitted in August 2015.
Certification issued (including Programmatically)?
☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No
Certification waived? ☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No
Certification denied? ☐ Yes, Attached (or mail copy separately if applying electronically) ☒ No

Exempted activity? ☐ Yes ☒ No
Agency concurrence? ☐ Yes, Attached ☒ No
If exempt, state why: N/A

Box 14 Coastal Zone Management Act:
Is the project located within the Coastal Zone? ☐ Yes ☒ No (If no, proceed to Box 15)

If yes, applying for a coastal commission-approved Coastal Development Permit?
☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No
If no, applying for separate CZMA-consistency certification?
☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No

Permit/Consistency issued? ☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No

Exempt? ☐ Yes ☐ No
Agency concurrence? ☐ Yes, Attached ☐ No
If exempt, state why: N/A

Box 15 List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Attachment A: Supplemental Information provides a list of the other certifications and approvals.

Agency	Type of Approval[4]	Identification Number	Date Applied	Date Approved	Date Denied

[4] Would include but is not restricted to zoning, building, and flood plain permits

Nationwide Permit General Conditions (GC) checklist:

(http://www.gpo.gov/fdsys/pkg/FR-2012-02-21/pdf/2012-3687.pdf)

Check	General Condition	Rationale for compliance with General Condition
☒	1. Navigation	The Project will have no effects on navigation.
☒	2. Aquatic Life Movements	The Project will not disrupt aquatic life movement or migration.
☒	3. Spawning Areas	The Project will not impact spawning areas.
☒	4. Migratory Bird Breeding Areas	The Project has the potential to impact migratory bird breeding areas. SCE would reduce impacts to nesting bird species in these areas by conducting pre-construction clearance surveys no more than seven days prior to construction to determine the location of nesting birds and territories during the nesting bird season (typically February 1 to August 31, earlier for species such as raptors). An avian biologist would establish a buffer area around active nest(s) and would monitor the effects of construction activities to prevent failure of the active nest. The buffer would be established based on construction activities, potential noise disturbance levels, and behavior of the species. Monitoring of construction activities that have the potential to affect active nest(s) would continue until the adjacent construction activities are completed or until the nest is no longer active.
☒	5. Shellfish Beds	The project will not impact shellfish beds.
☒	6. Suitable Material	Fill will consist of either native soil or imported soil. No visual or olfactory indications of soil contamination have been identified at the Project site. SCE will prepare and implement a Project-specific Soil Management Plan that will include precautionary measures and methods for handling potentially contaminated soils at all sites that involve excavation activities. In the event that unanticipated, contaminated soil is encountered during excavation activities, the soil will be segregated and soil samples will be collected and analyzed to determine appropriate disposal or treatment options. Based on the results of the analysis, SCE will decide whether to remove the contaminated soil, or modify the design of the Project to avoid contaminated soil.
☒	7. Water Supply Intakes	The Project will not occur in the proximity of a public water supply intake.
☒	8. Adverse Effects from Impoundments	The Project will not create an impoundment of water.
☒	9. Management of Water Flows	SCE will prepare and implement a drainage plan to minimize surface water and erosion impacts. Existing drainage structures, facilities, and devices may need to be modified, removed, replaced, and/or relocated to meet post-development hydrology conditions. The substation pad area will be finish-graded from a high point elevation at the east end of the pad to the perimeter at a slope of approximately one percent. Drainage inlets and pipes will be constructed to collect and divert storm water runoff. The surrounding area will be regraded and the low points will be filled to provide positive surface drainage to the southwest. Currently, the property generally drains by sheet flow to ephemeral drainages that exit the site at the southwest corner. These ephemeral drainages connect to storm drains that connect to the Rio Hondo Channel, which flows into the Los Angeles River. A detention pond will be constructed in the southwest corner of the new substation site, and other site and source control best management practices (BMPs) will be included in the design to help mitigate surface runoff. Drainage systems will be constructed along the perimeter of the substation to direct interior surface runoff to the detention pond. The site will be designed to comply with the latest jurisdictional

		agency Low-Impact Development Standard Manual and a National Pollutant Discharge Elimination System permit. The permanent cut and fill slopes for the proposed Mesa Substation and the permanent cut and fill for the access roads and detention pond will be stabilized during construction by utilizing BMPs described in the Project's Storm Water Pollution Prevention Plan (SWPPP). Landscaping will also be installed around the perimeter of the substation site. Appropriate SWPPP BMPs will remain in place and will be maintained until the landscaping has been established.
☒	10. Fills Within 100-Year Floodplains	No fill will occur within the 100-year floodplain.
☒	11. Equipment	Heavy equipment will be utilized in a manner to minimize soil disturbance.
☒	12. Soil Erosion and Sediment Controls	SCE will develop a drainage plan to account for flows that are interrupted by the substation on the upslope side, as well as runoff from within the substation limits, and will ensure that drainage through and runoff from the substation does not result in the alteration of downstream drainage features outside the substation limits. Thus, runoff will not cause significant erosion when compared to pre-construction conditions. In addition, as discussed under General Condition 9, SCE will implement BMPs described in the Project's SWPPP. Commonly used BMPs are storm water runoff, sediment, and erosion control measures, dewatering procedures, and concrete waste management. Landscaping will also be installed around the perimeter of the substation site. Appropriate SWPPP BMPs will remain in place and will be maintained until the landscaping has been established.
☒	13. Removal of Temporary Fills	All temporary impacts will be restored to pre-Project conditions.
☒	14. Proper Maintenance	All constructed facilities will be maintained to ensure reliable service, as well as the safety of the utility workers and the general public, as mandated by the California Public Utilities Commission.
☒	15. Single and Complete Project	The Project is a single and complete project.
☒	16. Wild and Scenic Rivers	The Project is not located in a component of the National Wild and Scenic River System, or designated "study river."
☒	17. Tribal Rights	The Project will not impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
☒	18. Endangered Species	A Biological Assessment has been submitted as part of this Pre-Construction Notification package in accordance with legal requirements set forth under Section 7 of the federal Endangered Species Act (ESA; 16 United States Code 1536[c]) to address the potential effects of the Project on federally listed threatened and endangered species that are present on site, their designated critical habitat, and proposed/candidate species for ESA protection.
☒	19. Migratory Bird and Bald and Golden Eagle Permits	The Project will be completed in full compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.
☒	20. Historic Properties	The Project will not result in an adverse impact/effect to a historic property or cause a substantial adverse change in the significance of any historic resource.
☒	21. Discovery of Previously Unknown Remains and Artifacts	The Project will notify the District Engineer if any previously unknown historic, cultural, or archeological remains or artifacts are discovered during construction.
☒	22. Designated Critical Resource Waters	The Project will not occur within any critical water resources, including National Oceanic and Atmospheric Administration-managed marine sanctuaries and marine monuments, and National

		Estuarine Research Reserves.
☒	23. Mitigation	SCE is in the process of developing a Compensatory Mitigation Plan to mitigate for permanent impacts resulting from construction of the Project. As described previously, permanent impacts to all jurisdictional water resources will be compensated at a 1-to-1 ratio, or as required by the permitting agencies.
☒	24. Safety of Impoundment Structures	The Project will not construct any impoundments.
☒	25. Water Quality	SCE will obtain a Water Quality Certification pursuant to Section 401 of the Clean Water Act from the Los Angeles RWQCB.
☒	26. Coastal Zone Management	The Project is not located within the coastal zone.
☒	27. Regional and Case-by-Case Conditions	The Project will be compliant with the Los Angeles District Final Regional Conditions for the 2012 Nationwide Permits.
☒	28. Use of Multiple Nationwide Permits	The Project will not require coverage under multiple Nationwide Permits.
☒	29. Transfer of Nationwide Permit Verifications	N/A
☒	30. Compliance Certification	Following completion of construction, SCE will provide the District Engineer a signed certification documenting completion of the authorized activity and any required compensatory mitigation.
☒	31. Pre-Construction Notification	A Pre-Construction Notification is being submitted for the Project.

NWP Regional Conditions (RC) checklist:

Los Angeles District (SPL) in Arizona and California:

1. Is the project located within a waterbody supporting any federally-listed threatened or endangered fish species?
☐ Yes ☒ No

   If yes, unless determined to be impracticable by the U.S. Army Corps of Engineers (Corps), the permittee shall design all road crossings to ensure that the passage and/or spawning of fish is not hindered. In these areas, the permittee shall employ bridge designs that span the stream or river, including pier- or pile-supported spans, or designs that use a bottomless arch culvert with a natural streambed.

2. Is the project located within the State of Arizona or the Mojave and Sonoran (Colorado) desert regions of California in the Los Angeles District[1]?
☐ Yes ☒ No

   [1]The desert regions in California are limited to four USGS Hydrologic Unit Code (HUC) accounting units (Lower Colorado – 150301, Northern Mojave – 180902, Southern Mojave-181001, and Salton Sea – 181002.

   If yes, is the applicant aware of the restriction described below?
☐ Yes ☐ No ☒ Not Applicable

   Nationwide Permits (NWP) 3, 7, 12-15, 17-19, 21, 23, 25, 29, 35, 36, 39-46, and 48-52 cannot be used to authorize structures, work, and/or the discharge of dredged or fill material that would result in the "loss" of wetlands, mudflats, vegetated shallows, or riffle and pool complexes, as defined at 40 CFR Part 230.40-45. The definition of "loss" for this regional condition is the same as the definition of "loss of waters of the United States" used for the Nationwide Permit Program.

3. Is pre-construction notification (PCN) required?
☒ Yes ☐ No

   If yes, then in accordance with General Condition 31, the appropriate Corps District shall be notified using either the South Pacific Division PCN Checklist or a signed application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional Conditions. The PCN Checklist and application form are available at: http://www.spl.usace.army.mil/Missions/Regulatory.aspx. In addition, the PCN shall include:

   a. A written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States; and
   b. Drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity as well as the location of delineated waters of the U.S. on the site. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and area (in acres) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the mean high water mark and high tide line, should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation. All drawings for projects located within the boundaries of the Los Angeles District shall comply with the most current version of the *Map and Drawing Standards for the Los Angeles District Regulatory Division* (available on the Los Angeles District Regulatory Division website at: http://www.spl.usace.army.mil/Missions/Regulatory.aspx); and
   c. Numbered and dated pre-project color photographs showing a representative sample of waters proposed to be impacted on the project site, and all waters proposed to be avoided on and immediately adjacent to the project site. The compass angle and position of each photograph shall be documented on the plan-view drawing required in subpart b of this regional condition.

If yes, is the PCN attached?
☒ Yes ☐ No ☐ Not Applicable

4. Are any of the regulated activities located in the following areas:

   a. All perennial waterbodies and special aquatic sites within the State of Arizona and within the Mojave and Sonoran (Colorado) desert regions of California, excluding the Colorado River in Arizona from Davis Dam to River Mile 261 (northern boundary of the Fort Mojave Indian Tribe Reservation). The desert region in California is limited to four USGS HUC accounting units (Lower Colorado -150301, Northern Mojave-180902, Southern Mojave-181001, and Salton Sea-181002).
   ☐ Yes ☒ No
   b. All areas designated as Essential Fish Habitat (EFH) by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092)), in which case the PCN shall include an EFH assessment and extent of proposed impacts to EFH. Examples of EFH habitat assessments can be found at: http://www.swr.noaa.gov/efh.htm.
   ☐ Yes ☒ No
   c. All watersheds in the Santa Monica Mountains in Los Angeles and Ventura counties bounded by Calleguas Creek on the west, by Highway 101 on the north and east, and by Sunset Boulevard and Pacific Ocean on the south.
   ☐ Yes ☒ No
   d. The Santa Clara River watershed in Los Angeles and Ventura counties, including but not limited to Aliso Canyon, Agua Dulce Canyon, Sand Canyon, Bouquet Canyon, Mint Canyon, South Fork of the Santa Clara River, San Francisquito Canyon, Castaic Creek, Piru Creek, Sespe Creek and the main-stem of the Santa Clara River.
   ☐ Yes ☒ No

   If yes to a, b, c, or d, notification to the Corps pursuant to General Condition 31 and Regional Condition 3 is required.

5. Will the proposed activity result in the discharge of fill material into jurisdictional vernal pools?
   ☐ Yes ☒ No

   If yes, an Individual Permit is required unless the discharges are for the purpose of restoration, enhancement, management, or scientific study of vernal pools, which may be authorized under NWPs 5, 6, and/or 27 with the submission of a PCN in accordance with General Condition 31 and Regional Condition 3.

6. a) Is project within the Murrieta Creek or Temecula Creek watersheds in Riverside County?
   ☐ Yes ☒ No
   b) Will the project require new permanent fill in perennial or intermittent watercourses?
   ☐ Yes ☒ No

   If yes to a and b, then projects which would otherwise be authorized under NWPs 29, 39, 42, or 43 (including cases where NWP 14 would be used in conjunction with above NWPs), will require an Individual Permit.

   c) Is the project located in an ephemeral watercourse?
   ☒ Yes ☐ No
   d) Will the project impact greater than 0.1 acre of waters of the U.S.?
   ☒ Yes ☐ No

   If yes to a, c, and d, then projects which would otherwise be authorized under NWPs 29, 39, 42, or 43 (including cases where NWP 14 would be used in conjunction with above NWPs), will require an Individual Permit.

7. a) Is the project a bank stabilization project in San Luis Obispo Creek or Santa Rosa Creek in San Luis Obispo County?
   ☐ Yes ☒ No

   b) Is the project a bank stabilization or grade control structure in Gaviota Creek, Mission Creek, or Carpinteria Creek in Santa Barbara County?
   ☐ Yes ☒ No
   If yes to a or b, then an Individual Permit (Standard Individual Permit or 404 Letter of Permission) is required.

8. Is the project located within the Los Angeles District's Special Area Management Plan (SAMP) areas for the San Diego Creek Watershed and San Juan Creek/Western San Mateo Creek Watersheds in Orange County, California?
☐ Yes ☒ No

   If yes, then the Corps' Division Engineer, through his discretionary authority, has revoked the use of the following 26 selected NWPs within these SAMP watersheds: 3, 7, 12, 13, 14, 16, 17, 18, 19, 21, 25, 27, 29, 31, 33, 39, 40, 41, 42, 43, 44, 46, 49, and 50. Consequently, these NWPs are no longer available in the above watersheds to authorize impacts to waters of the United States from discharges of dredged or fill material under the Corps' Clean Water Act section 404 authority.

9. Will the activity result in the loss of greater than 300 linear feet of intermittent and/or ephemeral streams for NWPs 29, 39, 40, 42, 43, 44, 51, and 52 or result in the loss of greater than 500 linear feet along the bank for NWP 13?
☐ Yes ☒ No

   If yes, is the applicant requesting a waiver of the linear foot limit?
☐ Yes ☐ No ☒ Not Applicable

   If yes, then the request shall include the following:

   a. A narrative description of the stream. This should include known information on: volume and duration of flow; the approximate length, width, and depth of the water body and characters observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line, or scour marks); a description of the adjacent vegetation community and a statement regarding the wetland status of the associated vegetation community (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information; and
   b. An analysis of the proposed impacts to the waterbody in accordance with General Condition 31 and Regional Condition 3; and
   c. Measures taken to avoid and minimize losses, including other methods of constructing the proposed project; and
   d. A compensatory mitigation plan describing how the unavoidable losses are proposed to be compensated, in accordance with 33 CFR Part 332.

10. Will the permittee complete the construction of any compensatory mitigation required by special condition(s) of the NWP verification before or concurrent with commencement of construction of the authorized activity?
☒ Yes ☐ No

    If no, then the proposed activity may not be in compliance with Regional Condition 10, unless construction of compensatory mitigation prior to or concurrent with commencement of construction of the authorized activity is specifically determined impracticable by the Corps.

    Will the mitigation involve use of a mitigation bank or in-lieu fee program?
☒ Yes ☐ No
If yes, then the permittee shall submit proof to the Corps of payment prior to commencement of construction of the authorized activity.

ATTACHMENT A: SUPPLEMENTAL INFORMATION

ATTACHMENT A: SUPPLEMENTAL INFORMATION

BOX 5: PROJECT LOCATION(S)

Table 1: Project Location Information summarizes the Mesa 500 kilovolt (kV) Substation Project (Project) location information for the eight United States (U.S.) Army Corps of Engineers-(USACE-) jurisdictional waters, including the approximate latitude and longitude, County Assessor Parcel Numbers (APNs), and U.S. Geologic Survey (USGS) Quadrangle map name.

Table 1: Project Location Information

Feature Number[1]	Approximate Latitude	Approximate Longitude	County APN	USGS Quadrangle Map Name
7-39-S-5	34.032086	-118.119423	5295-001-021 5295-002-801 5295-002-802	El Monte
11-94-S-5	34.035027	-118.115016	5275-001-018 5275-002-803 5275-002-810 5275-002-812 5275-002-814	
7-38-S-1 7-39-S-1 11-138-S-100	34.038079	-118.106642	5275-003-805	
	34.035527	-118.109537	5275-002-810 5275-003-805	
	34.034018	-118.112794	5275-002-810	
7-39-S-6	34.033822	-118.112699	5275-002-810	
7-39-S-2	34.034371	-118.10948	5275-002-808 5275-002-809 5275-002-810	
7-39-S-3	34.036507	-118.106503	5275-003-002 5275-003-800 5275-003-805	
11-136-S-100	34.040556	-118.109133	5265-001-809 5265-001-810	

[1] For the sake of consistency, nomenclature from the Tehachapi Renewable Transmission Project delineation reports was used to identify the mapped features.

Feature Number[1]	Approximate Latitude	Approximate Longitude	County APN	USGS Quadrangle Map Name
11-136-S-101			5265-001-813 5276-013-008	
	34.039782	-118.108817	5265-001-803 5265-001-810 5265-001-812	
7-39-S-11 (Rio Hondo)	34.029353	-118.070839	5271-009-902 5271-010-904	

BOX 6: NATURE OF ACTIVITY

The main activity associated with the Project involves the construction of an approximately 69.4-acre, 500/220/66/16 kV substation (Mesa Substation) in place of the existing, approximately 21.6-acre, 220/66/16 kV Mesa Substation. The Project is located primarily on approximately 86.2 acres of Southern California Edison Company (SCE) fee-owned property. Construction of the proposed Mesa Substation will be conducted in phases, and the power lines from the existing Mesa Substation will be relocated to the new switchracks as they are constructed. All of the existing Mesa Substation structures and equipment will be removed.

SCE currently operates various 220 kV transmission lines, 66 kV subtransmission lines, 16 kV distribution lines, and telecommunications lines that connect to the existing Mesa Substation. As part of the Project, SCE will replace existing structures and lines, as necessary, to allow these existing circuits to connect to the proposed Mesa Substation configuration. In addition, the Project involves the loop-in of one existing 500 kV circuit and two existing 220 kV circuits that currently pass through the existing Mesa Substation property. The Project includes the following elements:

- Construct the 500/220/66/16 kV Mesa Substation. This substation will be constructed on the existing 220/66/16 kV Mesa Substation site. Mesa Substation will be a staffed, 3,360 megavolt-ampere (MVA) at 500/220 kV, 840 MVA at 220/66 kV, and 56 MVA at 66/16 kV, substation with a potential capacity of 4,480 MVA at 500/220 kV, 1,120 MVA at 220/66 kV, and 112 MVA at 66/16 kV at ultimate build-out

- Remove, relocate, and construct new transmission, subtransmission, and distribution structures within existing SCE transmission and substation fee-owned properties, rights-of-way (ROWs), and franchise areas to accommodate the new Mesa Substation configuration

- Install new telecommunications lines and remove old telecommunications lines on existing subtransmission and distribution structures

- Install temporary steel pole structures and conductor to temporarily connect the Eagle Rock-Mesa 220 kV Transmission Line to Goodrich Substation and provide a second line of service to the City of Pasadena during the line outage required to loop-in the existing Goodrich-Laguna Bell 220 kV Transmission Line into Mesa Substation

- Minor internal modifications within the existing fenced perimeter of multiple existing substations

- Convert three spans of existing streetlight source lines from overhead to underground below one span of the Lighthipe-Mesa 220 kV Transmission Line

The components of the Project are described in more detail in the following subsections, and are shown in Figure 1: Project Components Overview Map in Attachment B: Figures.

Mesa Substation will be a 500/220/66/16 kV staffed, automated substation, operating at 3,360 MVA at 500/220 kV, 840 MVA at 220/66 kV, and 56 MVA at 66/16 kV. The substation capacity will have the potential to expand to 4,480 MVA at 500/220 kV, 1,120 MVA at 220/66 kV, and 112 MVA at 66/16 kV, as necessary. The proposed Mesa Substation will be constructed on approximately 69.4 acres within approximately 86.2 acres of SCE fee-owned property located in the City of Monterey Park, in Los Angeles County. The existing Mesa Substation occupies approximately 21.6 acres—within the same approximately 69.4-acre area that the proposed Mesa Substation will be constructed. Figure 2: Proposed Substation Layout in Attachment B: Figures shows the dimensions of the substation parcel and the placement and orientation of the major components that will be included in the construction of Mesa Substation. Construction of Mesa Substation includes the following main components:

- Construct a new 500 kV switchrack with three 500/220 kV transformer banks

- Loop-in the existing Mira Loma-Vincent 500 kV Transmission Line (which currently passes through the substation without landing on a rack position) into the new 500 kV switchrack with new overhead getaways

- Replace existing 220/66/16 kV switchracks, three 220/66 kV transformer banks, and two 66/16 kV transformer banks

- Relocate eight existing 220 kV transmission lines to the new 220 kV switchrack with new overhead getaways

- Loop-in the existing Goodrich-Laguna Bell 220 kV and Laguna Bell-Rio Hondo 220 kV transmission lines (which both currently pass through the substation without landing on a rack position) into the new 220 kV switchrack with new overhead getaways

- Relocate 16 existing 66 kV subtransmission lines to the new 66 kV switchrack with new underground getaways

- Relocate five existing 16 kV distribution lines to the new 16 kV switchrack with new underground getaways

- Construct two new Mechanical Electrical Equipment Rooms (MEERs), a Test and Maintenance Building, and an Operations Building
- Relocate various telecommunications cables
- Remove a Metropolitan Water District 72-inch-diameter waterline that currently runs through the middle of the proposed Mesa Substation property and replace it with an 84-inch-diameter waterline to a westerly location on the substation site
- Relocate two sets of third-party cellular telephone buildings, towers, and antennas to the northeast corner of the property
- Install new 16 kV distribution Station Light and Power supplies from the existing franchise areas adjacent to Mesa Substation to replace the existing supplies

Development of the substation site includes a storm water system. A detention pond will be developed in the southwest corner of the substation site as depicted in Figure 2: Proposed Substation Layout in Attachment B: Figures. The detention pond will be approximately 1 acre with a capacity of approximately 455,000 gallons and will be constructed from mulch, gravel, soil, and geotextile membrane layers. Water runoff around the transformer banks will flow into a catch basin system installed around each transformer, which connects to a drainage pipe that flows into a concrete lined detention basin, approximately 100 feet long, 50 feet wide, and 20 feet deep. Drainage systems will be constructed along the perimeter of the substation to direct interior surface runoff to the detention pond.

Primary access to the proposed Mesa Substation will be provided from Potrero Grande Drive via a new asphalt and/or concrete access driveway. Secondary access will be provided via a new access driveway off of East Markland Drive. The entrance at Potrero Grande Drive will be approximately 150 feet wide, and the entrance at East Markland Drive will be approximately 25 feet wide. Gates will be installed at both driveway entrances. SCE will construct a sidewalk along Potrero Grande Drive outside of the substation and will provide landscaping around the entire perimeter.

The proposed substation will be enclosed on all sides by a perimeter wall measuring at least 10 feet high, which will satisfy City of Monterey Park requirements for materials and aesthetics. Barbed wire and/or razor wire will be affixed near the top of the perimeter enclosure inside of the substation and will not be visible from the outside.

Construction

Staging Areas

Construction of the Project will require the establishment of temporary staging yards. Two types of staging yards will be used during construction—substation construction staging yards and transmission, subtransmission, distribution, and/or telecommunications construction staging yards. Staging yards will be used as a reporting location for workers, vehicle and equipment parking, and material storage. The yards may have construction trailers for supervisory and clerical personnel to serve as office and meeting locations. Staging yards may be lit for security

purposes. Normal maintenance and refueling of construction equipment will also be conducted at these yards. All refueling and storage of fuels will be in accordance with the Project's Storm Water Pollution Prevention Plan (SWPPP).

All proposed staging yards will be located within SCE fee-owned property. The preferred acreage for each yard will be 5 to 25 acres in size, depending on land availability and intended use. Preparation of the staging yards will include temporary perimeter fencing and, depending on existing ground conditions at the site, clearing and grubbing and/or grading may be required to provide a plane and dense surface for the application of gravel or crushed rock in some locations. Land disturbed at the staging yards will either be returned to pre-construction conditions or left in its modified condition.

Work Areas

Transmission and subtransmission construction work areas serve as working areas for crews and where Project-related equipment and/or materials are placed at or near each structure location, within SCE property, existing public ROWs, or franchise areas.

The new structure pad locations and laydown/work areas will first be cleared of vegetation and/or graded as required to provide a reasonably vegetation-free and level surface for structure installation. Sites requiring grading will be graded such that water will run toward the direction of the natural drainage. In addition, drainage will be designed to prevent ponding and erosive water flows that could cause damage to the structure footings. The graded area will be compacted to at least 90-percent relative density, and will be capable of supporting heavy vehicular traffic.

Erection of the structures may also require establishment of a temporary crane pad. Crane pads will occupy an area of approximately 50 feet by 50 feet and be located adjacent to each applicable structure within the laydown/work area used for structure assembly. The pads may be cleared of vegetation and/or graded as necessary to provide a level surface for crane operation. The decision to use a separate crane pad will be determined during final engineering for the Project and the selection of the appropriate construction methods to be used by SCE or its Contractor.

Access Roads and/or Spur Roads

Where required, a network of existing access roads could be improved and new roads will be constructed to current SCE road specifications to support the construction and Operation and Maintenance (O&M) of the Project.

Typical transmission access consists of a network of unpaved and paved roads accessed from public and private roads. These access roads include a network of through roads and spur roads that are used to access transmission facilities. Access to the transmission line ROW for construction activities and future O&M activities associated with the Project will be accomplished by utilizing this network of roads.

During construction of the Project, crews will utilize existing public roads and existing transmission access roads to the maximum extent feasible. New access roads will be constructed in accordance with current SCE practices for safety during construction and O&M.

Rehabilitation, road widening, and/or upgrades to existing access roads may also be required to facilitate construction access and to support O&M activities. Typical construction activities associated with rehabilitation of existing unpaved access roads include vegetation clearing, blade-grading, grubbing, mowing, and re-compacting to remove potholes, ruts, and other surface irregularities in order to provide a riding surface that is capable of supporting heavy construction and maintenance equipment. Existing unpaved roads may also require additional upgrades, such as protection (e.g., soil cover and steel plates) for existing underground utilities.

Typical construction activities associated with new roads generally include similar activities as described for the rehabilitation of existing unpaved roads, but may also include the following additional construction requirements that depend upon the existing land terrain:

- **Existing relatively flat terrain with grades up to four percent:** Construction activities are generally similar to rehabilitation activities on existing unpaved roads and may also require activities such as clearing and grubbing, as well as constructing drainage improvements (e.g., wet crossings, water bars, and culverts). Detailed information on locations requiring drainage improvements will be provided during final engineering.
- **Existing rolling terrain with grades of five to 12 percent:** Construction activities generally include typical to flat terrain activities and may also require cut and fill in excess of 2 feet in depth, benched grading, drainage improvements (e.g., v-ditches, downdrains, and energy dissipaters), retaining walls, and slope stability improvements (e.g., geogrid reinforcement). The extent of retaining walls and slope stability improvements will be determined during final engineering, as will detailed information on locations requiring cut and fill, benched grading, and/or drainage improvements.
- **Existing mountainous terrain with grades over 12 percent:** Construction activities will include rolling terrain construction activities and will also likely require significant cut and fill depths, benched grading, drainage improvements, and slope stability improvements. Detailed information on locations requiring cut and fill, benched grading, and/or drainage improvements will be provided during final engineering.

Typical construction activities associated with temporary access could include vegetation clearing, blade-grading, grubbing, mowing, and re-compacting.

In addition, other slope stability systems considered include mechanically stabilized systems, along with drainage improvements (i.e., v-ditches, downdrains, and energy dissipaters). The extent of slope stability improvements and earth-retaining structures will be determined during final engineering.

Generally, access roads will have a minimum drivable width of 14 feet with 2 feet of shoulder on each side, as determined by the existing land terrain to accommodate required drainage features. Typically, the drivable road width will be widened and will generally range up to an additional 8 feet along curved sections of the access road, creating up to 22 feet of drivable surface for the access road. Access road gradients will be leveled so that sustained grades generally do not exceed 14 percent. Curves will typically have a minimum radius of curvature of 50 feet measured from the center line of the drivable road width. Specific site locations may require a wider drivable area to accommodate multi-point turns where 50-foot minimum radii cannot be achieved.

Access roads will typically have turnaround areas around the structure location. In some cases where a turnaround is not practical, an alternative configuration will be constructed to provide safe ingress/egress of vehicles to access the structure location. It is common to use access road turnaround areas for the dual purpose of structure access and as a construction pad for construction activities. If a construction pad is built, it will remain a permanent feature for O&M.

The Project access roads generally follow the proposed transmission line route. Transmission line roads are classified into two groups: access roads and spur roads. Access roads are through roads that run between tower sites along a ROW and serve as the main transportation route along line ROWs. Spur roads are roads that lead from access roads and terminate at one or more structure sites due to terrain considerations and topographic constraints.

Approximately 5.6 miles of existing dirt access roads on SCE property and existing ROWs will be used to access the Project work areas. If improvements are required, they will be conducted in accordance with existing O&M practices.

Transmission Line Construction

Trenching

Construction activities will begin with the survey of existing underground utilities along the proposed underground subtransmission source line route.

The Project includes a total of approximately 5.5 miles of new underground 66 kV subtransmission lines and associated transition and support structures. A trench measuring approximately 2 feet wide and 2.5 feet deep will be required to place the 66 kV subtransmission line underground. Trenching may be performed by using the following general steps, including but not limited to: mark the location and applicable underground utilities, lay out trench line, saw cut asphalt or concrete pavement as necessary, dig to appropriate depth with a backhoe or similar equipment, and install the new duct bank. Once the duct bank has been installed, the trench will typically be backfilled with a sand slurry mix. Excavated materials will be reused as fill for the Project and/or be disposed of at an off-site disposal facility in accordance with applicable laws if necessary. Should groundwater be encountered, it will be pumped into a tank and disposed of at an off-site disposal facility in accordance with applicable laws.

The trench for underground construction will be widened and/or shored where appropriate to meet California's Division of Occupational Safety and Health requirements. Trenching will be staged so that open trench lengths will not exceed that which is required to install the duct banks. Where needed, open trench sections will have steel plates placed over them in order to maintain vehicular and pedestrian traffic. Provisions for emergency vehicle access will be arranged with local agencies in advance of construction activities.

Subtransmission Vault Installation

Installation of each vault will typically take place over a one-week period depending on soil conditions. First, the vault pit will be excavated and shored; a minimum of 6 inches of mechanically compacted aggregate base will be placed to cover the entire bottom of the pit, followed by delivery and installation of the vault. Once the vault is set, grade rings and the vault casting will be added and set to match the existing grade. The excavated area will be backfilled

with a sand slurry mix to a point just below the top of the vault roof. Excavated materials, if suitable, will be used to backfill the remainder of the excavation and any excess spoils will be disposed of at an off-site disposal facility in accordance with all applicable laws. Finally, the excavated area will be restored as required.

Fiber Optic Installation

New underground conduit and structures will typically be installed with a backhoe. The trench will be excavated to approximately 24 inches wide and a minimum of 36 inches deep. PVC conduit will be placed in the trench and covered with approximately 30 inches of concrete slurry then backfilled and compacted. For manholes and pull boxes, a hole will be excavated between 6 and 9 feet deep, 7 and 8 feet long, and 6 and 7 feet wide. The manhole or pull box will be lowered into place, connected to the conduits, and the hole backfilled with concrete slurry.

Jack-and-Bore

SCE will use the horizontal jack-and-bore construction technique to install the conduit at locations along the underground route where open-cut trenching may not be permitted or may not be otherwise feasible or preferred, such as at railroad and trolley tracks, roads, and drainage channel crossings.

Jack-and-bore is an augering operation that simultaneously pushes a casing under an obstacle and removes the spoil inside the casing with a rotating auger. Boring operations will begin with excavating bore pits at the sending and receiving ends of the bore. Boring and receiving pits will typically measure approximately 20 feet by 40 feet. The depth of the proposed bore pits will be between 10 and 20 feet, depending on the facilities that will be crossed. It is anticipated that between 590 and 1,180 cubic yards (CY) of material will be excavated to facilitate each jack-and-bore installation required for the Project. Following the duct bank installation, the bore pits will be backfilled using native material, and the duct bank will be covered with at least 36 inches of engineered or native fill, as appropriate. Soil not used for backfill will be hauled off site and disposed of at an approved facility.

After establishing the bore pits, boring equipment will be delivered to the site and then installed into the bore pit at the sending end. Jack-and-bore crossings involve pushing or boring a 36- to 42-inch steel casing through the earth and under the obstacle being crossed. Depending on soil conditions, water is often used to lubricate the auger during the boring process. The casings will typically be installed at least 3 to 4 feet below the obstacle, or as required by the relevant permitting agency. Once the casing is in place, the conduit will be installed within the casing by using spacers to hold them in place, and then the remaining space will be backfilled with a slurry mix. The casings will be left in place to protect the conduit once it has been installed. An approximately 150-foot by 150-foot temporary construction area will be required at each bore pit location.

Mesa Substation Construction

Prior to construction, the Mesa Substation site will be cleared and graded to prepare the site for construction. Approximately 83.3 acres of the site will be graded. Approximately 20 acres of on-site vegetation will be removed during the clearing, grubbing, and grading for the construction of the proposed Mesa Substation, including trees along the frontage and within the fence line of the

existing Mesa Substation site. Mowers, excavators, front-end loaders, and/or D-9 bulldozers will be utilized to conduct the clearing and vegetation removal activities.

Construction of the proposed Mesa Substation will occur in phases, as shown in the attached Figure 3: Grading Phase Areas in Attachment B: Figures. Phase 1 involves preliminary activities, such as relocation of the Metropolitan Water District of Southern California water pipeline, vegetation removal, removal of some equipment stored on site, and installation of temporary fencing. This phase includes all construction associated with the following:

- the first eight 220 kV switchrack positions,
- the entire 66 kV and 16 kV switchracks,
- two 220/66 kV transformer banks,
- two 66/16 kV transformer banks,
- two 66 kV capacitor banks,
- two 16 kV capacitor banks, and
- the necessary underground and overhead facilities to connect the relocated circuits (of all three voltage levels).

This phase also includes, but is not limited to, activities such as mass grading; access road construction, including retaining walls; construction of the senior and junior Mechanical and Electrical Equipment Rooms; assembly and erection of various transmission and subtransmission overhead structures; and possibly the construction of the Operations Building and the Test and Maintenance Building. This phase involves the import of approximately 100,000 CY of fill to develop the western portion of the proposed Mesa Substation site. Phase 1 will generally occur between the second quarter of 2016 and the fourth quarter of 2018.

Phase 2 involves the extension of the new 220 kV switchrack, one 220/66 kV transformer bank, one 66 kV capacitor bank, and the necessary underground and overhead facilities to connect the relocated circuits (of both voltage levels). This will include, but is not limited to, activities such as decommissioning and removal of the western portion of the existing 220 kV switchrack; grading and civil improvements, including the detention basin and other drainage improvements; construction of the southern portion of the new 220 kV switchrack; and assembly and erection of various transmission and subtransmission overhead structures. This phase will generally occur between the second quarter of 2018 and the first quarter of 2019.

Phase 3 includes decommissioning and demolition of the balance of the existing substation, construction of the new 500 kV switchrack on the eastern portion of the site, and connecting the transmission lines. This phase will include, but is not limited to, activities such as structural and civil demolition and access road construction, including retaining walls; installation of foundations and piping for three 500/220 kV transformer banks, including Spill Prevention, Control and Countermeasure Plan facilities; and assembly and erection of various transmission overhead switchracks and transmission towers. This phase will generally take place between the first quarter of 2019 and the fourth quarter of 2020. However, post-construction testing after the substation is operational will occur through the second quarter of 2021.

Site grading will be accomplished primarily with bulldozers and backhoes, which will condition, cut and fill, and blend the native soil and imported material to the desired pad elevations. A

summary of the anticipated grading quantities for Mesa Substation is provided in Table 2: Grading Quantities Summary. Phase 1 construction of Mesa Substation will require approximately 100,000 CY—or approximately 10,000 haul truckloads—of imported fill to develop the substation site. Phase 3 will require approximately 50,000 CY—or approximately 5,000 haul truckloads—of import material to be hauled to the substation site. Haul trucks will operate periodically and as needed during the grading phase of construction. In general, no more than 100 haul truck trips per day will be required for the import/export activities.

Table 2: Grading Quantities Summary

Phase	Fill Quantity (CY)	Cut Quantity (CY)	Import/Export Quantity (CY)	Source/ Destination
1	250,000	150,000	100,000	Quarry within 45 miles of the site
2	5,000	70,000	(65,000)	Stockpile for Phase 3
3	325,000	375,000	(50,000)	Landfill within 45 miles of the site
Total	**580,000**	**595,000**	**--**	**--**

Notes: Export values in Phase 2 are included in the cut values in Phase 3. Phase 3 raw cut volume is 310,000 CY.
"--" indicates "not applicable."

Vegetation Clearance

The proposed Mesa Substation site will require vegetation clearing (i.e., tree and brush removal) within its boundaries to prepare the approximately 69.4-acre site for installation of the substation equipment.

Vegetation clearing (i.e., tree and brush removal and tree trimming) may also be required in the proposed transmission ROWs to accommodate construction work areas, and to reduce the potential for fire during construction activities.

Cleanup and Post-Construction Restoration

SCE will clean up all areas that will be temporarily disturbed by construction of the Project (which may include the material staging yards, stringing sites, and splicing sites) to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE following the completion of construction of the Project.

If restoration and/or revegetation occurs within sensitive habitats, a Habitat Conservation and Restoration Plan, or "Revegetation Plan," will be developed by SCE with the appropriate resource agencies and implemented after construction is complete.

Construction Workforce and Equipment

Construction will be performed by either SCE construction crews, contractors, or a combination of both. If SCE construction crews are used, they typically will be based at SCE's local facilities (e.g., service centers, substations, etc.) or a temporary material staging yard set up for the

Project. Contractor construction personnel will be managed by SCE construction management personnel and based out of the Contractor's existing yard (if they have one in the area) or a temporary material staging yard set up for the Project. SCE anticipates a total of 84 to 242 construction personnel will be working on any given day. SCE anticipates that crews will work concurrently whenever possible; however, the estimated deployment and number of crew members will vary depending on factors such as material availability, resource availability, and construction scheduling.

In general, construction efforts will occur in accordance with accepted construction industry standards. If feasible, SCE will comply with local ordinances for construction activities.

Construction Schedule

SCE anticipates that construction of the Project will take approximately 57 months. Construction of the Project is anticipated to begin in April 2016, and will end in December 2020 with energization of the substation. Construction will commence following California Public Utilities Commission (CPUC) approval, final engineering, procurement activities, land rights acquisition, and receipt of all applicable permits.

BOX 6: PROJECT PURPOSE

SCE is a public utility that provides electric service to a population of approximately 14 million people within a 50,000-square-mile service area that encompasses 180 cities throughout Southern California. The Project will address reliability concerns resulting from the pending shutdown of certain generation facilities which rely on Once Through Cooling Technology as well as the recent retirement of the San Onofre Nuclear Generating Station. The Project will address these concerns by providing additional transmission import capability, allowing greater flexibility in the siting of new generation, and reducing the total amount of new generation required to meet local reliability needs in the Western Los Angeles Basin area.

BOX 6: PROPOSED DISCHARGE OF DREDGE AND/OR FILL MATERIAL

Information for each of the water features located on the Project site—including the area of each USACE-jurisdictional feature, the amount of permanent and temporary impacts, and the Project activities resulting in impacts to these features—is provided in Table 3: USACE-Jurisdictional Resources and Impacts within the Project Site. As shown in Table 3: USACE-Jurisdictional Resources and Impacts within the Project Site, a total of approximately 0.37 acre of waters of the U.S. will be permanently impacted, and approximately 0.09 acre of waters of the U.S. will be temporarily impacted by construction of the Project. Figure 4: Impacts to Waters of the U.S. in Attachment B**:** Figures depicts the location of the Project components in relation to each of the USACE-jurisdictional features and identifies which of the features are anticipated to be impacted. Attachment C: Photographs of Impacted Water provides photographs of the USACE-jurisdictional features located on site that will be impacted by construction of the Project.

Table 3: USACE-Jurisdictional Resources and Impacts within the Project Site

Feature Number	Feature Type	Approximate USACE-Jurisdictional Area (acres/ linear feet)	Approximate Impact to USACE-Jurisdictional Feature (acres/linear feet)[3]		Approximate Fill Volume to be Discharged (CY)	Impact Description
			Permanent	Temporary		
7-39-S-5	Ephemeral drainage	0.04/ 715.81	--	0.04/ 715.81	--	This feature will be temporarily impacted by a transmission tower disturbance area.
11-94-S-5	Ephemeral drainage	0.11/ 1,987.41	0.11/ 1,987.41	--	28.91	This feature will be permanently impacted by the construction of the Mesa Substation.
7-38-S-1 7-39-S-1 11-138-S-100	Ephemeral drainage	0.01/ 363.85	0.01/ 363.85	--	1.62	This feature will be permanently impacted by the construction of Mesa Substation.
		0.08/ 2,179.78	0.08/ 2,179.78	--	68.78	This feature will be permanently impacted by construction of Mesa Substation.
		0.07/ 458.41	0.07/ 458.41	--	8.06	This feature will be permanently impacted by construction of Mesa Substation.
7-39-S-6	Ephemeral drainage	0.03/ 441.81	0.03/ 441.81	--	3.27	This feature will be permanently impacted by construction of Mesa Substation.
7-39-S-2	Ephemeral drainage	0.03/ 423.04	0.03/ 423.04	--	7.61	This feature will be permanently impacted by construction of Mesa Substation.
7-39-S-3	Ephemeral drainage	0.04/ 440.19	0.04/ 440.19	--	1.45	This feature will be permanently impacted by construction of Mesa Substation.
11-136-S-100 11-136-S-101	Ephemeral drainage	0.03/ 376.54	--	0.03/ 376.54	--	This feature will be temporarily impacted as a result of a subtransmission tower disturbance area.

Feature Number	Feature Type	Approximate USACE-Jurisdictional Area (acres/ linear feet)	Approximate Impact to USACE-Jurisdictional Feature (acres/linear feet)[3]		Approximate Fill Volume to be Discharged (CY)	Impact Description
			Permanent	Temporary		
		0.02/ 260.17	--	0.02/ 260.17	--	This feature will be temporarily impacted as a result of a subtransmission tower disturbance area.
7-39-S-11 (Rio Hondo)	Intermittent Drainage	0.15/ 200.00	--	--	--	There will be no impacts to this feature.
TOTAL	--	**0.61/ 7,847.01**	**0.37/ 6,294.49**	**0.09/ 1,352.52**	**122.49**	--

Figure 5: Impacts to Waters of the U.S.: Typical Plan and Cross-Section Drawing in Attachment B: Figures depicts how drainages will be permanently filled to allow for construction of the substation.

BOX 6: TYPES(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS

As provided in Table 2: Grading Quantities Summary, on page A-10, above, approximately 100,000 CY of imported fill will be required during Phase 1. An additional 50,000 CY of imported fill will be required during Phase 3. Approximately 122.49 CY of fill—consisting of native and imported soil—will be discharged into waters of the U.S. The fill and base materials are anticipated to be obtained from a quarry within 45 miles of the site. On-site material will be reused to the extent possible, as recommended by the Geotechnical Engineer. Site grading will be accomplished primarily with bulldozers and backhoes, which will condition, cut and fill, and blend the native soil and imported material to the desired pad elevations.

BOX 6: DESCRIBE DIRECT AND INDIRECT EFFECTS CAUSED BY THE ACTIVITY

Construction of the Project will result in direct temporary impacts of approximately 0.09 acre, and direct permanent impacts of 0.37 acre to waters under the jurisdiction of the USACE. SCE will mitigate for permanent impacts to all jurisdictional water resources at a 1-to-1 ratio, or as required by the USACE. Indirect impacts to non-jurisdictional wetlands could also result from spillage of construction materials, as well as from erosion and sedimentation. SCE will prepare and implement a drainage plan to minimize surface water and erosion impacts. Existing drainage structures, facilities, and devices may need to be modified, removed, replaced, and/or relocated to meet post-development hydrology conditions. The substation pad area will be finish-graded from a high point elevation at the east end of the pad to the perimeter at a slope of approximately one percent. Drainage inlets and pipes will be constructed to collect and divert storm water runoff. The surrounding area will be regraded and the low points will be filled to provide positive surface drainage to the southwest.

Currently, the Mesa substation site generally drains by sheet flow into ephemeral drainages, which exit the site at the southwest corner. These ephemeral drainages connect to storm drains that connect to the Rio Hondo Channel, which flows into the Los Angeles River. A detention pond will be constructed in the southwest corner of the new substation site, and other site and source control best management practices (BMPs) will be included in the design to help mitigate surface runoff. Drainage systems will be constructed along the perimeter of the substation to direct interior surface runoff to the retention basin. The site will be designed to comply with the latest jurisdictional agency Low-Impact Development Standard Manual and a National Pollutant Discharge Elimination System permit.

The permanent cut and fill slopes for the proposed Mesa Substation and the permanent cut and fill for the access roads and retention basin will be stabilized during construction by utilizing BMPs described in the Project's SWPPP. Landscaping will also be installed around the perimeter of the substation site. Appropriate SWPPP BMPs will remain in place and will be maintained until the landscaping has been established.

BOX 6: POTENTIAL CUMULATIVE IMPACTS OF PROPOSED ACTIVITY

Table 4: Cumulative Projects Within 1 Mile of the Project Area summarizes cumulative projects within 1 mile of the Project. The construction of the Project will result in direct temporary impacts of approximately 0.09 acre, and direct permanent impacts of 0.37 acre to waters of the U.S. Two cumulative projects—the Montebello Hills Master Planned Community and the Monterey Park Market Place—have the potential to result in impacts to waters of the U.S. Any projects impacting waters within the cumulative scenario will be subject to the same federal and State permitting requirements for impacts to waters of the U.S., which are intended to minimize and mitigate for impacts to these resources, both at the project level and in a regional context. As a result, cumulative impacts to USACE- jurisdictional waters are expected to be minimized with the implementation of permit conditions.

BOX 9: MEASURES TAKEN TO AVOID AND MINIMIZE IMPACTS TO WATERS OF THE UNITED STATES

No impacts to the Rio Hondo would occur as a result of the Project. SCE will mitigate for permanent impacts to all USACE-jurisdictional water resources at a 1-to-1 ratio, or as required, in accordance with applicant-proposed measure (APM-) BIO-08 from the Final Proponent's Environmental Assessment prepared for the Project. SCE will implement the following measures to minimize impacts to jurisdictional resources:

- **APM-BIO-02: Revegetation Plan.** To the extent feasible, SCE will minimize impacts and permanent loss to riparian habitat, native trees, and other vegetation that is regulated by federal, State, or local agencies, and/or that provides suitable habitat for special-status species. Impacts will be minimized at construction sites by flagging native vegetation to be avoided. If unable to avoid impacts to protected vegetation, a Revegetation Plan would be prepared in coordination with the appropriate agencies for areas of native habitat temporarily and/or permanently impacted during construction. The Revegetation Plan will describe, at a minimum, which vegetation restoration method (e.g., natural revegetation, planting, or reseeding with native seed stock in compliance with the Project's SWPPP) will be implemented in the Project area. The Revegetation Plan will also include the species or habitats that could be impacted, the replacement or restoration ratios (as appropriate), the restoration methods and techniques, and the monitoring periods and success criteria, as identified in each measure.

- **APM-BIO-08**: **Compensation for Permanent Impacts.** Permanent impacts to all jurisdictional water resources will be compensated at a 1-to-1 ratio, or as required by the USACE, California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB).

Table 4: Cumulative Projects Within 1 Mile of the Project Area

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
N/A	2015 Mesa Substation 66 kV capacitor	Mesa Substation	Mesa Substation	Within	Approved	2018
N/A	New Mesa Substation Distribution Substation Plan (DSP) circuit	Mesa Substation	Mesa Substation	Within	Pending	2021
State Clearinghouse Number (SCN) 1999051058	Monterey Park Market Place: Approximately 600,000-square-foot commercial retail center, gas station, and 2,333 parking spaces at Greenwood Avenue and Potrero Grande Avenue	City of Monterey Park	New telecommunications line from transmission tower M40-T3 to Mesa Substation	Adjacent	Approved	2015 (Estimated Start)-2016[2]
General Plan Amendment (GPA-) 13-02 Specific Plan (SP-) 13-02	2015 Potrero Grande Drive Specific Plan: 80 residential units on an approximately 9.15-acre parcel at 2015 Potrero Grande Drive	City of Monterey Park	New telecommunications line from transmission tower M40-T3 to Mesa Substation	Adjacent	Approved	2014-2016[3]
SP-13-01	500 East Markland Drive Specific Plan: An approximately 127,492-square-foot, four-story, public self-storage facility on	City of Monterey Park	Telecommunications line reroute between Mesa and Harding substations	Adjacent	Approved	2014-2015[4]

[2] The construction schedule was obtained from the Monterey Park Market Place developer.
[3] The construction schedule was obtained from the Mitigated Negative Declaration, adopted by the City of Monterey Park on February 5, 2014.
[4] The construction schedule was obtained from City of Monterey Park staff.

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
	approximately 1.12 acres at the southwest corner of Potrero Grande Drive and Markland Drive					
N/A	Jay Imperial Park: Currently vacant SCE transmission corridor properties along San Gabriel Boulevard will be redeveloped as open space, complete with walking trails, grass, native landscaping, and related amenities	City of Rosemead	New telecommunications line from transmission tower M40-T3 to Mesa Substation	Adjacent	Capital Improvement Project for the 2014-2015 fiscal year	--
N/A	Thienes Avenue (East): Cold milling existing asphalt concrete and asphalt concrete overlay; removal and replacement of damaged sidewalk, driveways, curbs and gutters; and other items, such as traffic striping, manhole, water, and gas valve adjustments on Durfee Avenue to County Park Entry and to San Gabriel River	City of South El Monte	New telecommunications line from transmission tower M38-T5 to Mesa Substation	Adjacent	Engineering Project for 2015	2015

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
N/A	South San Gabriel Bikeway Access Improvements: Installation of 2.43 miles of Class II Bike Lane and 1 mile of four- to three-lane road diet. Located on North San Gabriel Boulevard	Unincorporated Los Angeles County	New telecommunications line from transmission tower M40-T3 to Mesa Substation	Adjacent	Design	Construction estimated to begin in Spring 2017
SCN 2007081156	Tehachapi Renewable Transmission Project: Construction of Segments 7, 8, and 11 of approximately 173 miles of transmission line with upgrades to several substations	Various cities, including the cities of Monterey Park, Montebello, and Pasadena	--	Adjacent	Under construction	2010-2015
N/A	Harding Substation Elimination: Cutover 178 transformers from 4 kV to 16 kV and elimination of substation equipment at the Corner of Montebello Boulevard and Lincoln Avenue	City of Montebello	Telecommunications line reroute between Mesa and Harding substations	Adjacent	--	2015
N/A	Montebello Boulevard/Towne Center Drive Resurfacing Median and Landscape Enhancements:	City of Rosemead	New telecommunications line from transmission tower M40-T3 to Mesa Substation	0.9, 0.42, and adjacent	Capital Improvement Project for the 2014-2015 fiscal year	--

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
	Resurfacing Montebello Boulevard and Towne Center Drive, landscaping medians on Montebello Boulevard and San Gabriel Boulevard and in public ROW areas adjacent to the California Department of Transportation maintenance yard					
SCN 2008011122	Montebello Hills Master Planned Community: An approximately 488-acre master planned community at Montebello Boulevard and Paramount Boulevard, including approximately 1,200 single-family residential units; approximately 315 acres of open space (including approximately 260 acres of federally protected habitat preserve, an approximately 5.5-acre public park, and approximately 13.5 acres of dedicated	City of Montebello	New telecommunications line from transmission tower M38-T5 to Mesa Substation	0.3	Draft Environmental Impact Report (EIR) released in March 2009; Final EIR is being prepared	--

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
	accessible trails and greenbelts); and an approximately 1.5-acre community center					
N/A	Durfee Avenue Construction Activity: 116-town home residential development; 6.02-acre gated community at 1181 Durfee Avenue	City of South El Monte	New telecommunications line from transmission tower M38-T5 to Mesa Substation	0.32	In construction	April 2014-Spring 2016
N/A	New distribution circuit required at the corner of Walnut Grove Avenue and Landis View Lane	City of Rosemead	New telecommunications line from transmission tower M40-T3 to Mesa Substation	0.4	--	2015
N/A	6039 Florence Avenue: 27,000-square-foot new store	City of Bell Gardens	Street light source line conversion from overhead to underground within Loveland Street	0.44	Preliminary Review	--
N/A	Cal Royal Products: 39,000-square-foot addition to existing 106,748-square-foot building at 6605 Flotilla Street	City of Commerce	Replacement of an existing lattice steel tower (LST) on the Goodrich-Laguna Bell 220 kV Transmission Line	0.56	Plan Check as of January 2, 2015	--
Project ID: RDC0015693	Allston Street Neighborhood: Preventative Maintenance to Allston Street Neighborhood	East Los Angeles	Replacement of an existing LST on the Goodrich-Laguna Bell 220 kV Transmission Line	0.64	Design	Estimated start: July 2017

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
N/A	Pace Apartments: 29 apartment units at 8540-8642 Beverly Boulevard	City of Pico Rivera	New telecommunications line from transmission tower M38-T5 to Mesa Substation	0.66	Project appeal denied for appeal by City Council on September 23, 2014. Conditional Use Permit denied by Planning Commission on September 3, 2014	--
SCN 2007071094	Las Encinas Hospital Master Development Plan: Construction of a new psychiatric hospital and expansion of senior living services on an approximately 24.7-acre site, including the removal of approximately 44,398 square feet of existing structures and the construction of approximately 309,012 square feet of new structures, resulting in a total building square footage of	City of Pasadena	Temporary 220 kV line loop-in at Goodrich Substation	0.7	Approved	Phase 1: October 2014-April 2016 Phase 2: April 2016-April 2017 Phase 3: July 2016-February 2017 Phase 4: May 2017-October 2017

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
	approximately 528,505 square feet					
N/A	Residential Development: 14-unit condominium at 3928 Rosemead Boulevard	City of Pico Rivera	New telecommunications line from transmission tower M38-T5 to Mesa Substation	0.71	Final Tract Map submitted to Public Works in October 2014	--
N/A	Florence Avenue Bridge Rehabilitation at Rio Hondo River: Rehabilitation of the Florence Avenue Bridge over the Rio Hondo River	City of Downey	Street light source line conversion from overhead to underground within Loveland Street	0.86	--	August 2016-March 2017
N/A	Garvey Avenue Specific Plan: Planned commercial, industrial, and residential development along Garvey Avenue, from New Avenue to San Gabriel Boulevard	City of Rosemead	New telecommunications line from transmission tower M40-T3 to Mesa Substation	0.97	Draft EIR expected in May 2015	--
SCN 2008081042	MTA-Interstate (I-) 710 Traffic/Freeway Project: Improvements to I-710	City of Bell Gardens	Street light source line conversion from overhead to underground within Loveland Street	0.98	Release Final I-710 Corridor Project EIR/EIS for public review and comment: Winter 2015/2016	--

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
IGR/CEQA No. 140538AL-MND Case no.: GPA 12-02, Zone Change (ZC) 12-02, Tentative Tract Map (TTM) 72529, Design Review (DR) 12-05, and Alley Vacation	Garvey Del Mar Mixed Use Project: Mixed use development located on 1.14 acres, including the demolition of all existing structures to construct a five-story, mixed use development with 15,553 square feet of retail/restaurant space on the basement/first and second floors and 60 residential units on the third through fifth floors, comprising 54,609 square feet, for a total built area of 70,162 square feet; located at 7801-7825 Garvey Avenue, 3012 Del Mar Avenue, and 3017 Brighton Street	City of Rosemead	New telecommunications line from transmission tower M40-T3 to Mesa Substation	0.99	Mitigated Negative Declaration approved by the Planning Commission in December 2014	--
N/A	Suva Street Bridge Rehabilitation at the Rio Hondo River: Rehabilitation of the Suva Street Bridge over the Rio Honda River (Los Angeles County Project)	City of Downey	Street light source line conversion from overhead to underground within Loveland Street	1.0	--	January 2016-June 2016

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
N/A	New distribution circuit required at the corner of Paramount Boulevard and Elba Street	City of Pico Rivera	New telecommunications line from transmission tower M38-T5 to Mesa Substation	1.0	--	2015
N/A	Pavement Rehabilitation Project: Resurfacing or reconstructing street sections (8.7 land miles) throughout the city and repair of damaged curb and gutter, driveway approaches, and sidewalks	City of Bell	--	--	Capital Improvement Project for 2014-2015 Fiscal Year	--
N/A	Slurry Seal Project: Apply asphaltic emulsion to various city streets in order to rejuvenate the existing pavement surface and extend the life of the existing asphalt concrete	City of Bell	--	--	Capital Improvement Project for the 2014-2015 Fiscal Year	--
N/A	Sidewalk Replacement: Part of the city's routine maintenance program to repair or replace damaged sidewalks throughout the city	City of Bell	--	--	Capital Improvement Project for the 2014-2015 Fiscal Year	--

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
Project number 3758	Project 2: Gallant/Lanto/Ajax/Ed Selinda/Gotham	City of Bell Gardens	Street light source line conversion from overhead to underground within Loveland Street	--	Design Complete	--
Project number 3768	Street Improvement Project: Lubec Street, El Selinda Avenue, and Adamson Avenue	City of Bell Gardens	Street light source line conversion from overhead to underground within Loveland Street	--	--	--
Project number 3763	Residential Street Rehabilitation Project: Suva/Live Oak/Loveland Street	City of Bell Gardens	Street light source line conversion from overhead to underground within Loveland Street	--	Design	--
N/A	Residential Street Resurfacing: Pavement rehabilitation of residential streets citywide	City of Downey	--	--	--	2014-2015

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
N/A	High Speed Rail: The California High-Speed Rail Authority is responsible for planning designing, building, and operation of the first high-speed rail system in the nation, and is currently refining alignment alternatives appropriate for the urban rail corridor from Los Angeles to Anaheim, and Los Angeles to San Diego	--	New telecommunications line from transmission tower M38-T5 to Mesa Substation	--	Design	--
SCN 2010011062	Metro Gold Line Extension: The Los Angeles County Metropolitan Transit Authority (Metro) is studying two light rail alternatives to extend the current Gold Line Eastside light rail beyond the Atlantic Station in East Los Angeles	To be determined	New telecommunications line from transmission tower M38-T5 to Mesa Substation	--	A draft EIR has been completed, and further analysis is required for both of the alternatives	--
N/A	Subtransmission Reconductor: 2.83 miles of reconductor on the Mesa-Laguna Bell – Narrows 66 kV line	City of Montebello	Telecommunications line reroute between Mesa and Harding substations	--	--	2015

Project Identification Number	Project Description	Location	Nearest Project Component	Approximate Distance to Project (Miles)	Status	Anticipated Construction Schedule
N/A	Subtransmission Reconductor: 0.58 mile of reconductoring on the Mesa-Rush No. 3 line. New line will tap off of Mesa-Rosemead No. 2 Line 1.5 miles to Rush Substation, located on the southeast corner of Walnut Grove Avenue and Rush Street	Between Mesa and Rush substations (within the cities of Monterey Park and Rosemead)	Telecommunications line reroute between Mesa and Harding substations	--	--	2015

Notes: "N/A" = Not Applicable; "--" = information not available.

Sources: California High Speed Rail Authority (2014), City of Bell (2014), City of Commerce (2014), City of Downey (2014), City of Monterey Park (2014a), City of Monterey Park (2014b), City of Monterey Park (2014c), City of Montebello (2009), City of Rosemead (2014a), City of Rosemead (2014b), City of Rosemead (2014c), City of Rosemead (2014d), City of Pasadena (2014), City of Pico Rivera (2014), City of South El Monte (2014), CPUC (2014b), County of Los Angeles (2014), Gonzalez (2014), Gutierrez (2015), Hernandez (2014), Lopez (2014), Lopez (2015), Los Angeles County (2014a), Los Angeles County (2014b), Metro (2014a), Metro (2014b), Metro (2014c), Platero (2014), Williams (2015)

As previously discussed, indirect impacts to other wetlands and waters could also result from spillage of construction materials, as well as from erosion and sedimentation. These potential impacts will be avoided and minimized through implementation of the Project's SWPPP, which is required by law. The Project SWPPP will require that vehicles be checked daily and maintained in accordance with manufacturer's specifications to minimize the potential for leaks, and refueling and maintenance of vehicles will occur at least 50 feet from the edge of any aquatic feature. With the implementation of these APMs and with adherence to applicable regulations, impacts to jurisdictional water features will be minimized.

BOX 11: THREATENED OR ENDANGERED SPECIES AND ESSENTIAL FISH HABITAT

As shown in Figure 1: Project Components Overview Map in Attachment B: Figures, natural areas are concentrated within four sections of the Proposed Project—the Mesa Substation site and adjacent ROWs; the Montebello Hills; the Rio Hondo corridor; and the San Gabriel River corridor. Table 5: Federally Listed Plant Species summarizes the federally listed plant species that have the potential to occur in the region of the Project. Of the five federally listed plant species, the following determinations were made:

- One federally-listed plant species—Nevin's barberry (*Berberis nevinii*)—is present within the Project area
- No species have a high potential to occur within the Project area
- No species have a moderate potential to occur within the Project area
- Three species—Braunton's milk-vetch (*Astragalus brauntonii*), slender-horned spineflower (*Dodecahema leptoceras*), and thread-leaved brodiaea (*Brodiaea filifolia*)—have a low potential to occur within the Project area
- One species—California orcutt grass (*Orcuttia californica*)—has no potential to occur

Table 6: Federally Listed Wildlife Species summarizes the federally listed wildlife species that have the potential to occur in the region of the Project. Of the five federally listed wildlife species, the following determinations were made:

- Two federally listed wildlife species—coastal California gnatcatcher (*Polioptila californica californica*) and least Bell's vireo (*Vireo bellii pusilus*)—were identified as being present within or near the Project area
- No wildlife species have a moderate potential to occur in the construction areas
- One species—southwestern willow flycatcher (*Empidonax traillii extimus*)—has a low potential to occur
- Two species—southern mountain yellow-legged frog (*Rana muscosa*) and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)—have no potential to occur

U.S. Fish and Wildlife Service (USFWS)-designated critical habitat for coastal California gnatcatcher is also located within the Project area. Project activity within critical habitat for this species will not involve any ground-disturbing activities, will be limited to the existing roads, and will not result in vegetation removal. Therefore, the Project will not impact critical habitat for coastal California gnatcatcher. SCE conducted protocol-level surveys for coastal California

Table 5: Federally Listed Plant Species

Species Name	Federal, State, and CNPS[5] Status[6]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Locations	Potential to Occur
Berberidaceae – Barberry Family					
Nevin's barberry (*Berberis nevinii*)	FE	Nevin's barberry is a perennial evergreen shrub that occurs in sandy or gravelly substrate in chaparral, cismontane woodland, coastal scrub, and riparian habitats. It is typically found at elevations from approximately 900 to 2,700 feet.	March through June	One California Natural Diversity Database (CNDDB) occurrence of this species is documented within 0.25 mile of the Mesa Substation site. This record is presumed extant. Three CNDDB occurrences of this species are documented within 5 miles of the Goodrich Substation site. All three records are presumed extant.	This species was observed in the San Gabriel River corridor during field surveys conducted by Insignia biologists in December 2014. **Present**
Fabaceae (Leguminosae) – Legume Family					
Braunton's milk-vetch (*Astragalus brauntonii*)	FE	Braunton's milk-vetch is a perennial herb that occurs in sandstone or carbonite layers in chaparral, coastal scrub, and valley and foothill grassland habitats. It usually occurs in areas that have been recently burned or disturbed. It is typically found at elevations from near sea level to approximately 2,100 feet.	March through July	No CNDDB occurrences of this species are documented within 5 miles of the Mesa Substation site. Two CNDDB occurrences of this species are documented within 5 miles of the Goodrich Substation site. Both records are presumed extant.	Suitable habitat for this species occurs in the Project area south of Mesa Substation and in the Montebello Hills area. However, no occurrences have been documented within 5 miles of the site. Two extant occurrences are near the Goodrich Substation site however, there is no suitable habitat in this location. **Low Potential**
Poaceae (Gramineae) – Grass Family					
California orcutt grass (*Orcuttia californica*)	FE	California orcutt grass is an annual herb that occurs in vernal pool habitats. It is typically found at elevations from approximately 50 to 2,150 feet.	April through August	One CNDDB occurrence for this species is documented within 5 miles of the Mesa Substation site; however, this occurrence is extirpated. No CNDDB occurrences of this species are documented within 5 miles of the Goodrich Substation site.	No suitable habitat for this species occurs in the Project area. **No Potential**
Polygonaceae – Buckwheat Family					
Slender-horned spineflower (*Dodecahema leptoceras*)	FE	Slender-horned spineflower is an annual herb that occurs in sandy substrates in chaparral, cismontane woodland, and alluvial fan coastal scrub habitats. It is typically found at elevations from approximately 650 to 2,500 feet.	May through June	No CNDDB occurrences of this species are documented within 5 miles of the Mesa Substation site. Two CNDDB occurrences of this species are documented within 5 miles of the Goodrich Substation site; however, both occurrences were recorded in 1920 and are extirpated.	Suitable habitat for this species occurs in the Project area in the Rio Hondo and San Gabriel River corridors. No documented occurrences are within 5 miles of this portion of the Project area. **Low Potential**

[5] California Native Plant Society
[6] Explanation of federal and state listing codes:

Federal listing codes:
-FE: Federally listed as Endangered
-FT: Federally listed as Threatened

Species Name	Federal, State, and CNPS[5] Status[6]	Habitat Preferences, Distribution Information, and Additional Notes	Flowering Phenology/ Life Form	Known Locations	Potential to Occur
Themidaceae – Brodiaea Family					
Thread-leaved brodiaea (*Brodiaea filifolia*)	FT	Thread-leaved brodiaea is a perennial bulbiferous herb that occurs in herbaceous plant communities, such as valley needlegrass grassland, valley sacaton grassland, non-native grassland, alkali playa, and vernal pool habitats. These herbaceous communities occur in open areas on clay soils at elevations from 100 to 2,500 feet.	March through June	No CNDDB occurrences of this species are documented within 5 miles of the Mesa Substation site. No CNDDB occurrences of this species are documented within 5 miles of the Goodrich Substation site.	Marginally suitable habitat for this species occurs in the Project area. **Low Potential**

Sources: CNDDB 2014, USFWS 2014, CNPS 2014

Table 6: Federally Listed Wildlife Species

Species Name	Listing Status[7]	Life History	Known Locations	Potential to Occur
Amphibians				
Southern mountain yellow-legged frog (*Rana muscosa*)	FE	This species is endemic to the southern Sierra Nevada and Transverse Ranges. It inhabits high mountain lake, stream, pond, and isolated pool habitat. Alpine lakes where this species occurs usually have water depths greater than 8.2 feet and have open shorelines with margins that are grassy or muddy. Breeding habitat consists of ponds, lakes, and streams that do not dry out in the summer, are deep enough that they don't freeze in the winter, and do not contain predatory fish. Breeding activity for southern mountain yellow-legged frog begins early in the spring and can range from April at lower elevations to June and July in higher elevations. Adults tend to move between breeding, feeding, and overwintering habitats throughout the course of the year. This species is typically found at elevations from approximately 1,000 to 12,000 feet.	Four CNDDB occurrences have been documented within 5 miles of the Goodrich Substation site; however, these occurrences are extirpated.	No suitable habitat for this species occurs within the Project area. In addition, the Project area is located below the typical elevation range associated with this species. **No Potential**
Birds				
Coastal California gnatcatcher (*Polioptila californica californica*)	FT	Coastal California gnatcatcher is an obligate, permanent resident of coastal sage scrub vegetation. It makes limited use of adjacent habitats outside of the breeding season. The species typically occurs in areas dominated by California sagebrush and California buckwheat. Other shrubs in the coastal sage scrub vegetation communities occupied by coastal California gnatcatcher include brittlebrush (*Encelia californica*), deerweed (*Lotus scoparius*), black sage (*Salvia mellifera*), and white sage (*Salvia apiana*).. The species is restricted to elevations from sea level to approximately 2,000 feet. Coastal California gnatcatcher breeds from February to late August, but most of the breeding occurs between mid-March and mid-May.	Two CNDDB occurrences of this species are documented within 0.25 mile of the Mesa Substation site, and three CNDDB occurrences are documented within 5 miles of the Mesa Substation site. All five records are presumed extant. One CNDDB occurrence is documented within 5 miles of the Goodrich Substation site; however, this occurrence was recorded in 1928 and is extirpated.	Critical habitat for this species occurs in the Montebello Hills and San Gabriel River corridor within the Project area. Coastal California gnatcatchers were observed nesting within the Mesa Substation site and in the Montebello Hills north of Lincoln Avenue during protocol-level surveys conducted in the spring of 2015. **Nesting: Present** **Foraging: Present**

[7] Explanation of federal listing codes:

Federal listing codes:
-FE: Federally Endangered Species
-FT: Federally Threatened Species
-FC: Candidate for Federal Listing

Species Name	Listing Status[7]	Life History	Known Locations	Potential to Occur
Least Bell's vireo (*Vireo bellii pusillus*)	FE	Least Bell's vireo is a rare and local summer visitor from mid-March to the end of August and ranges from sea level in coastal areas to approximately 1,500 feet in the interior areas. Least Bell's vireo breeds locally in willow riparian thickets with good overstory and understory vegetation, preferably where flowing water is present. This species typically inhabits structurally diverse woodlands along watercourses, including oak woodlands, mulefat scrub, and cottonwood-willow forests. During the breeding season, this species may forage in adjacent upland habitats. Little is known about this species' winter habitat, but it is not exclusively dependent on riparian woodland during winter. In winter, least Bell's vireos primarily occur in mesquite scrub vegetation in arroyos, but some also use palm groves and hedgerows associated with agricultural fields and rural residential areas. Breeding typically occurs from late March to late September.	One CNDDB occurrence of this species is documented within 0.25 mile of the Mesa Substation site. This record is presumed extant. Five CNDDB occurrences are documented within 5 miles of the Mesa Substation site, three of which are possibly extirpated and two of which are presumed extant. Observations of this species including one pair were recorded by Whittier Narrows Nature Center staff at three locations within the Whittier Narrows Recreation Area between April and July 2014. Three CNDDB occurrences are documented within 5 miles of the Goodrich Substation site. However, two occurrences were recorded in 1923 and 1895 and are possibly extirpated. The third was recorded in 1924 and is presumed extant.	Suitable habitat for least Bell's vireo nesting and foraging occurs in the Montebello Hills, and along the San Gabriel River corridor within the Project area, where this species is known to occur. This species was not identified as nesting on the Mesa Substation site during four years of monitoring for the Techapi Renewable Transmission Project (TRTP). Least Bell's vireo was observed nesting and foraging in the Montebello Hills, the Rio Hondo corridor and the San Gabriel River corridor during surveys conducted for the TRTP. **Nesting: Present** **Foraging: Present**
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE	Southwestern willow flycatcher winters in Mexico, Central America, and northern South America. It usually breeds in patchy to dense riparian habitats along streams or other wetlands, near or adjacent to surface water or underlain by saturated soil. Common tree and shrub species comprising nesting habitat includes willows, mulefat, box elder (*Acer negundo*), stinging nettle (*Urtica* spp.), blackberry (*Rubus* spp.), cottonwood (*Populus* spp.), arroweed (*Tessaria sericea*), tamarisk (*Tamarix ramosissima*), and Russian olive (*Eleagnus angustifolia*). Breeding sites for this species usually consist of dense vegetation with small openings, open water, or shorter/sparser vegetation, creating a mosaic that is not uniformly dense. In almost all cases, slow-moving or still surface water and/or saturated soil is present at or near the breeding sites during wet years. This species has been found at elevations from sea level to over 8,500 feet, but is primarily found in lower-elevation riparian habitats. This species breeds from mid-May to late August.	There are two CNDDB occurrences of this species within 5 miles of the Mesa Substation site. Both records are presumed extant. One of these occurrences is also documented within 0.25 mile of the Goodrich Substation site.	Suitable breeding or foraging habitat for this species occurs in the Project area; however, the occurrences near these areas were recorded in 1894 and 1906 when more riparian habitat will have been present. **Low Potential**
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	FC	Western yellow-billed cuckoo arrives in California as early as May and departs by mid-September. This species prefers to nest in open woodlands with clearings and dense scrubby vegetation, often along water. Breeding habitat generally consists of mixed old growth riparian forests consisting of willow and cottonwood. Breeding generally occurs in the summer between May and August at elevations below 2,500 feet.	There is one CNDDB occurrence of this species documented within 5 miles of the Mesa Substation site. This record is presumed extant. No CNDDB occurrences are documented within 5 miles of the Goodrich Substation site.	No suitable habitat for this species occurs in the Project area. **No Potential**

Sources: CNDDB 2014, CDFW 2011, USFWS 2014

gnatcatcher during the spring of 2015. Two nesting pairs were identified within the Mesa substation site; one pair has three fledglings that are present and the other has three fledglings. Four pairs of coastal California gnatcatchers were observed in the Montebello Hills, north of Lincoln Avenue. Surveys results are provided in Attachment D: Protocol-Level Coastal Gnatcatcher Surveys.

Least Bell's vireo was observed nesting and foraging in riparian areas within the Montebello Hills, the Rio Hondo corridor and the San Gabriel River corridor during surveys previously conducted for the TRTP. This species was not identified on the Mesa Substation site during four years of monitoring for the TRTP. Southwestern willow flycatcher may also nest in riparian areas within the Project site. Project activity within riparian areas will be limited to the existing roads, will not result in vegetation removal in riparian habitat, and will take place outside of the nesting season. Therefore, the Project will not impact least Bell's Vireo or southwestern willow flycatcher.

Special-status plant surveys conducted in 2015 did not identify Braunton's milk-vetch, slender-horned spineflower, thread-leaved brodiaea, or California orcutt grass on the Project site. One individual Nevin's barberry shrub is present on site, and appears to have been planted as part of a demonstration garden. Work within the area of this shrub will be limited to walking new overhead cables between poles and climbing poles to install the cables. This individual shrub will be flagged and avoided during work within this area. As such, special-status plant species will not be impacted by the Project.

A Biological Assessment (BA) has been prepared in accordance with legal requirements set forth under Section 7 of the federal Endangered Species Act (ESA; 16 U.S. Code 1536[c]) to address the potential effects of the Project on federally listed threatened and endangered species that were found to be present on the site. The BA is provided in Attachment E: Biological Assessment.

BOX 15: OTHER CERTIFICATIONS OR APPROVALS/DENIALS RECEIVED FROM OTHER FEDERAL, STATE, OR LOCAL AGENCIES

Table 7: Other Agency Certifications or Approvals summarizes other certifications or approvals that will be required by federal, state, or local agencies for the Project.

Table 7: Other Agency Certifications or Approvals

Permit/Approval/Consultation	Agency	Identification Number	Date Applied	Anticipated Submittal Date	Date Approved/Denied
Federal Agencies					
Section 408 Permit	USACE	--	--	February 2016	--
Section 7 Consultation	USFWS	--	--	June 2015	--
State Agencies					
Permit to Construct	CPUC	A. 15-03-003	March 13, 2015	--	--
Section 1602 Lake or Streambed Alteration Agreement	CDFW	--	--	August 2015	--
Section 401 Water Quality Certification	Los Angeles RWQCB	--	--	August 2015	--
National Pollutant Discharge Elimination System General Construction Permit	State Water Resources Control Board	--	--	August 2015	--
Encroachment Permit	California Department of Transportation	--	--	April 2016	--
Local Agencies					
Encroachment Permit	Cities of Monterey Park, Montebello, and Bell Gardens	--	--	July 2016	--
Grading Permit	City of Monterey Park	--	--	December 2015	--

REFERENCES

California High Speed Rail Authority. (2014). *Project Update Report to the California State Legislature*. Retrieved December 30, 2014, from http://www.hsr.ca.gov/docs/about/legislative_affairs/SB1029_ProjectUpdate_FINAL_111414.pdf.

CDFW. (2011). Special Animals. California Natural Diversity Database. Biogeographic Data Branch. Natural Resources Agency, State of California. September 2014.

Chiang, C. and W. Tinsley Becker (2014a). Historical Resource Analysis Report / Historic Property Survey Report Southern California Edison Company Eagle Rock Substation Property. Prepared by Urbana Preservation & Planning LLC. Prepared for southern California Edison. Prepared for Southern California Edison.

Chiang, C. and W. Tinsley Becker (2014b). Historical Resource Analysis Report / Historic Property Survey Report Southern California Edison Company Laguna Bell and Lighthipe Substation Properties. Prepared by Urbana Preservation & Planning LLC. Prepared for southern California Edison. Prepared for Southern California Edison.

City of Bell. (2014). Capital Improvement Projects: 2014/15 Budget. Retrieved December 31, 2014, from http://www.cityofbell.org/home/showdocument?id=4895.

City of Commerce. (2014). Planning/Environmental Documents for Review. Retrieved December 31, 2015 from http://www.ci.commerce.ca.us/index.aspx?nid=357.

City of Downey (2014). Department of Public Works City of Downey Capital Improvement Projects. Retrieved on December 31, 2014 from http://www.downeygis.org/CipPrjsPublicUse/CIP%20Projects%20Main/ShowCIP_Projects_MainTable.aspx.

City of Montebello (2009). *Draft Environmental Impact Report for the Montebello Hills Specific Plan.* Retrieved August 28, 2104 from http://www.cityofmontebello.com/depts/planning_n_community_development/planning_division/montebello_hills_specific_plan.asp.

City of Monterey Park. (2014a). Document Center. Retrieved August 28, 2014, from http://www.montereypark.ca.gov/DocumentCenter/View/1165 and http://www.montereypark.ca.gov/DocumentCenter/View/1178.

City of Monterey Park. (2014b). *Initial Study 2015 Potrero Grande Residential.* Retrieved August 28, 2014, from http://qcode.us/codes/montereypark/revisions/2104.pdf.

City of Monterey Park. (2014c). *Initial Study for the 500 E Markland Specific Plan (SP-13-01).* Retrieved August 28, 2014, from http://qcode.us/codes/montereypark/revisions/2101.pdf.

City of Pasadena. (2014). Zoning and Community Planning Project List. August 27, 2014.

City of Pico Rivera. (2014). Personal communication with D. Althaus, Insignia Environmental. December 8, 2014.

City of Rosemead. (2014a). City News. Retrieved December 30, 2014, from http://www.cityofrosemead.org/index.aspx?recordid=1279&page=13.

City of Rosemead. (2014b). Document Center. Retrieved October 8, 2014, from http://www.cityofrosemead.org/gcsearch.aspx?q=EIR.

City of Rosemead. (2014c). 2014-15 Fiscal Year Budget. Retrieved December 30, 2014, from www.cityofrosemead.org/Modules/ShowDocument.aspx?documentid=2827.

City of Rosemead. (2014d). PC - Item 3A - Public Hearing - Design Review 12-05, General Plan Amendment 12-02, Zone Change 12-02, Tentative Tract Map 72529, and Alley Vacation 7801-7825 Garvey Avenue, 3012 Del Mar Avenue and 3017 Brighton Street. Retrieved December 30, 2014, from http://www3.cityofrosemead.org:8081/WebLink8/DocView.aspx?id=35317&dbid=0.

City of South El Monte. (2014). *New Homes Coming to South El Monte.* Retrieved December 30, 2014, from http://www.ci.south-el-monte.ca.us/Portals/0/Current%20Projects/Durfee%20Housing%20Project.pdf.

CNDDB. (2014). CNDDB Maps & Data. Retrieved July 22, 2014, from http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

County of Los Angeles. (2014). Upcoming Projects. Retrieved December 30, 2014, from http://dpw.lacounty.gov/pdd/bike/projects.cfm.

CPUC. (2014). Current Projects. Retrieved December 30, 2014 from http://www.cpuc.ca.gov/puc/energy/environment/current+projects/index.htm.

Davis, Wendell. (1959). P-19-186540 Historical Landmarks Form. On file at South Central Coastal Information Center, University of California, Fullerton.

DeBiase, K. and Wendy Tinsley Becker (2014). Historical Resource Analysis Report / Historic Property Survey Report Southern California Edison Company San Gabriel and Repetto Substation Properties. Prepared by Urbana Preservation & Planning LLC. Prepared for Southern California Edison.

Gonzalez, Julia. City of Pico Rivera, Community and Economic Development Department. Personal communication with D. Althaus, Insignia Environmental. December 8, 2014.

Gutierrez, Erica. City of Bell Gardens, Community Development Department, Planning Division. Personal Communication with D. Althaus, Insignia Environmental. January 8, 2015.

Fulton, Terri, and Phil Fulton. (2008). P-19-003813 Department of Parks and Recreation Form. Prepared by LSA Associates, Inc. On file at South Central Coastal Information Center, University of California, Fullerton.

Hernandez, Lina. City of Bell Gardens, City Manager's Office. Personal Communication with D. Althaus, Insignia Environmental. December 31, 2014.

Lopez, Christopher, SCE (2014). Personal communication with R. Gonzales, SCE. November 12, 2014.

Lopez, Christopher, SCE. (2015). Personal communication with D. Althaus, Insignia Environmental. January 8, 2015.

Los Angeles County. (2014a). Department of Public Works Road Rehabilitation. Retrieved December 31, 2014, from, http://dpw.lacounty.gov/pdd/roadrehab/.

Los Angeles County. (2014b). Department of Public Works Projects. Retrieved December 31, 2014, from http://dpw.lacounty.gov/pdd/bike/projects.cfm.

Los Angeles County Metropolitan Transportation Authority. (2014a). *Draft Environmental Impact Statement/Environmental Impact Report.* Retrieved December 30, 2014, from http://www.metro.net/projects/eastside_phase2/draft-eis-eir/.

Los Angeles County Metropolitan Transportation Authority. (2014b). Eastside Transit Corridor Phase 2. Retrieved December 30, 2014, from http://www.metro.net/projects/eastside_phase2/.

Los Angeles County Metropolitan Transit Authority (2014c). I-710 Corridor Project Overview. Retrieved December 31, 2014, from http://www.metro.net/projects/i-710-corridor-project/710_overview/.

Messick, Peter (2003). P-186889 Department of Parks and Recreation Form. On file at South Central Coastal Information Center, University of California, Fullerton.

PAR Environmental Services, Inc. (2012). P-19-190334 Department of Parks and Recreation Form. On file at South Central Coastal Information Center, University of California, Fullerton.

Platero, Juan. City of South El Monte, Engineering Department. Personal communication with D. Althaus, Insignia Environmental. December 17, 2014.

Roberts, Lois, and James Brock. (1987). Cultural Resources Archival Study: Whittier Narrows Archaeological District. Prepared for USACE, Los Angeles District. Prepared by Archaeological Advisory Group, Newport Beach, California.

Shoeni, Richard. (1972). P-19-178617 Point of Historical Interest Form. On file at South Central Coastal Information Center, University of California, Fullerton.

Tsunoda, Koji (2008). P-186889 Department of Parks and Recreation Form. On file at South Central Coastal Information Center, University of California, Fullerton.

USFWS. (2014). Critical Habitat Mapper. Retrieved July 22, 2014, from http://criticalhabitat.fws.gov/.

Williams, Audry. (2014). Historical Resource Analysis Report / Historic Property Survey Report Southern California Edison Company Mesa 500 kV Substation Project (with contributions by Wendy L. Tinsley-Becker). Prepared by Southern California Edison.

Williams, Lovell. City of Montebello, Planning and Community Development Department, Planning Division. Personal communication with D. Althaus, Insignia Environmental. January 6, 2015.

ATTACHMENT B: FIGURES

Figure 1:
Project Components Overview Map

Mesa 500 kV Substation Project

Temporary 220 kV line loop-in at Goodrich Substation

Mesa Substation and associated transmission, subtransmission, distribution, and telecommunications lines

New telecommunications line from transmission tower M40-T3 to Mesa Substation

New telecommunications line from transmission tower M38-T5 to Mesa Substation

Telecommunications line re-route between Mesa and Harding substations

Replacement of an existing lattice steel tower on the Goodrich-Laguna Bell 220 kV Transmission Line

Street light source line conversion from overhead to underground within Loveland Street

Rio Hondo Corridor

Montebello Hills

San Gabriel River Corridor

Main Component Location

Mesa Substation Study Area

Proposed Telecommunications

Natural Areas

Montebello Hills

Rio Hondo Corridor

San Gabriel River Corridor

Detail Area

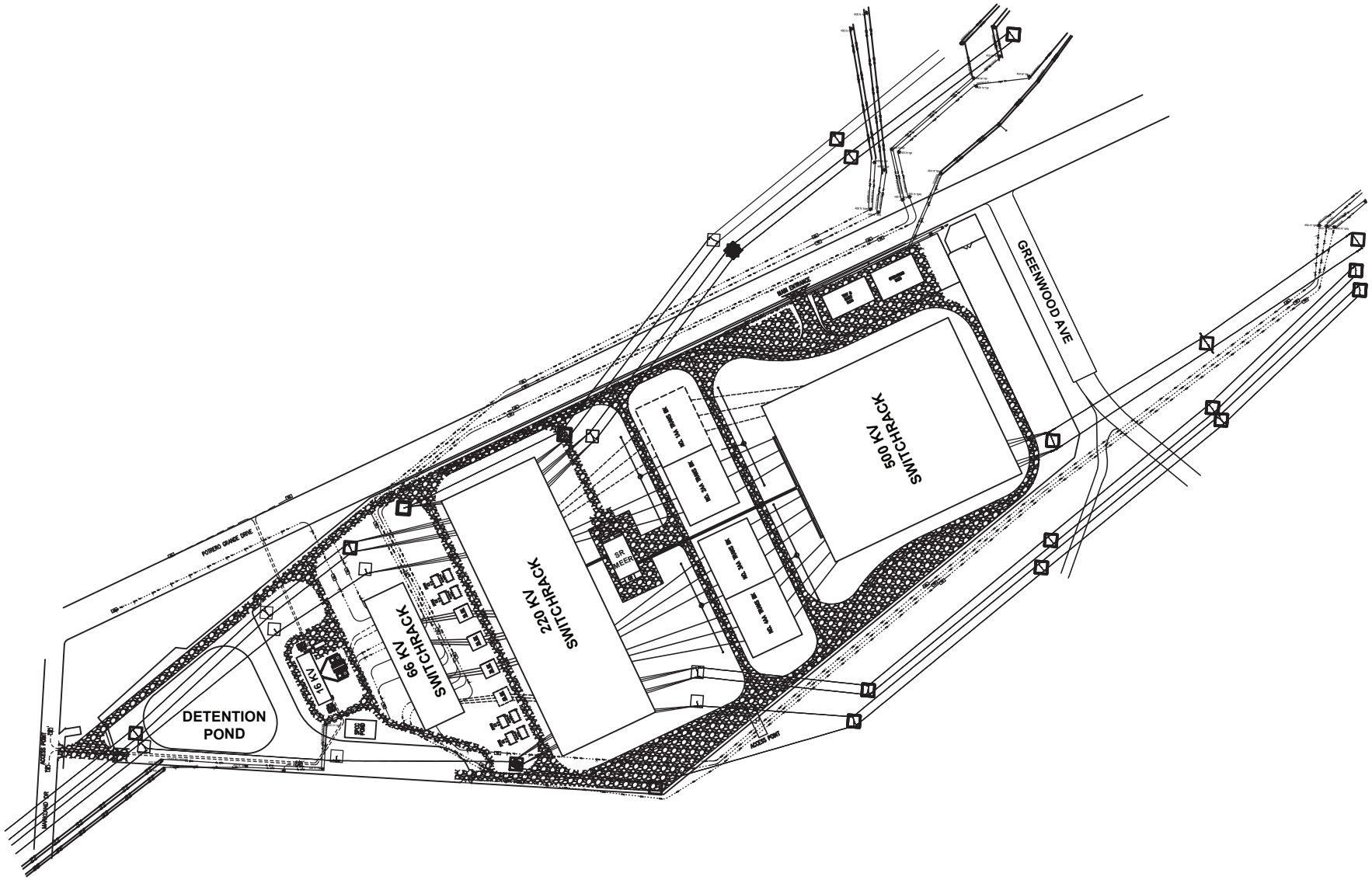
SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:87,000

0 1 2 Miles

Z:\Projects\SCE_Mesa\MXDs\Permits\404\Fig_1_Overview.mxd 5/29/2015



SOUTHERN CALIFORNIA EDISON®
An *EDISON INTERNATIONAL*® Company

Figure 2: Proposed Substation Layout

Figure 3:
Grading Phase Areas
Mesa 500 kV Substation Project

Phase Area
- Phase 1
- Phase 2
- Phase 3
- City Boundary

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,000
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Permits\404\Grading_Phases.mxd 06/26/15

Figure 4:
Impacts to Waters of the U.S.
Overview

Mesa 500 kV Substation Project

Project Area

Mesa Substation Site

Map Extent

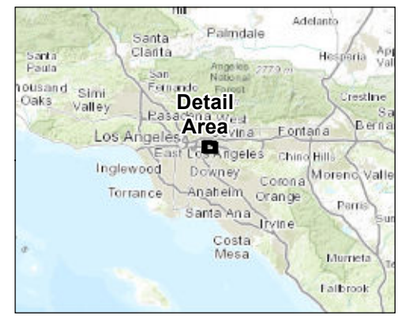
Jurisdictional Waters of the U.S.

Rio Hondo (No Impacts)

Water Permanently Impacted

Water Temporarily Impacted

Flow Direction



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:16,500

0 500 1,000 Feet

Z:\Projects\SCE_Mesa\MXDs\Permits\404\Waters_Overview.mxd 5/29/2015

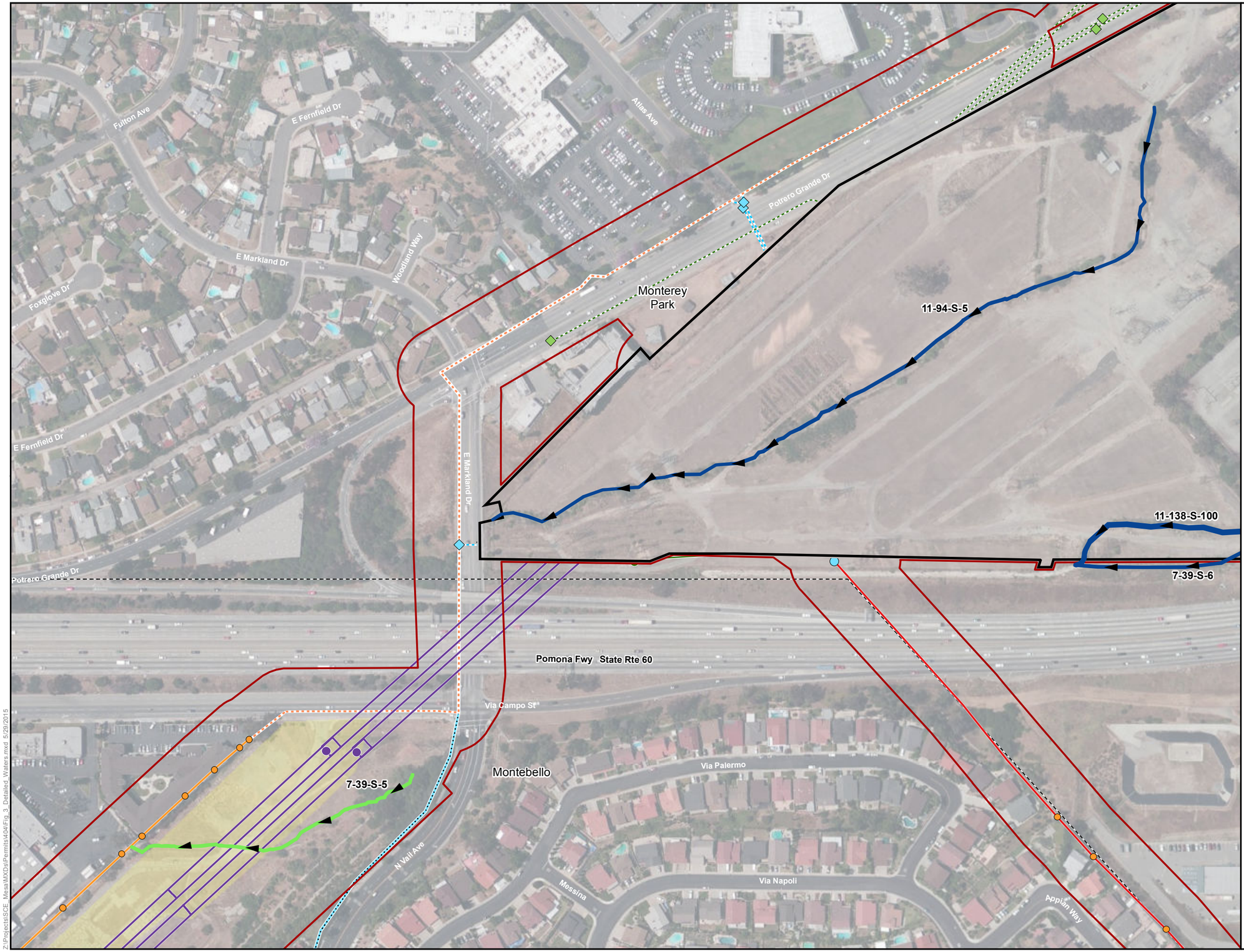


Figure 4:
Impacts to Waters of the U.S.
Map 1 of 4

Mesa 500 kV Substation Project

City Boundary

Jurisdictional Waters of the U.S.
- Rio Hondo (No Impacts)
- Water Permanently Impacted
- Water Temporarily Impacted
- Flow Direction

Project Components
- Project Area
- Mesa Substation Site
- Staging Yard

500 kV Transmission
- Proposed 500 kV Structure
- Proposed 500 kV Line

220 kV Transmission
- Proposed Temporary 220 kV Structure
- Proposed 220 kV Structure
- Proposed 220 kV Line

66 kV Subtransmission
- Proposed 66 kV Vault
- Proposed 66 kV Structure
- Proposed Underground 66 kV Line
- Proposed Overhead 66 kV Line

Telecommunications
- Proposed Vault/Manhole
- Existing Pole
- Proposed Overhead (On Existing Facilities)
- Proposed Underground
- Re-Route Overhead
- Re-Route Underground

16 kV Distribution
- Proposed 16 kV Vault
- Proposed 16 kV Pole
- Proposed 16 kV Underground Line
- Re-Route 16 kV Underground Line (In Existing Facilities)

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

ENSIGNIA ENVIRONMENTAL

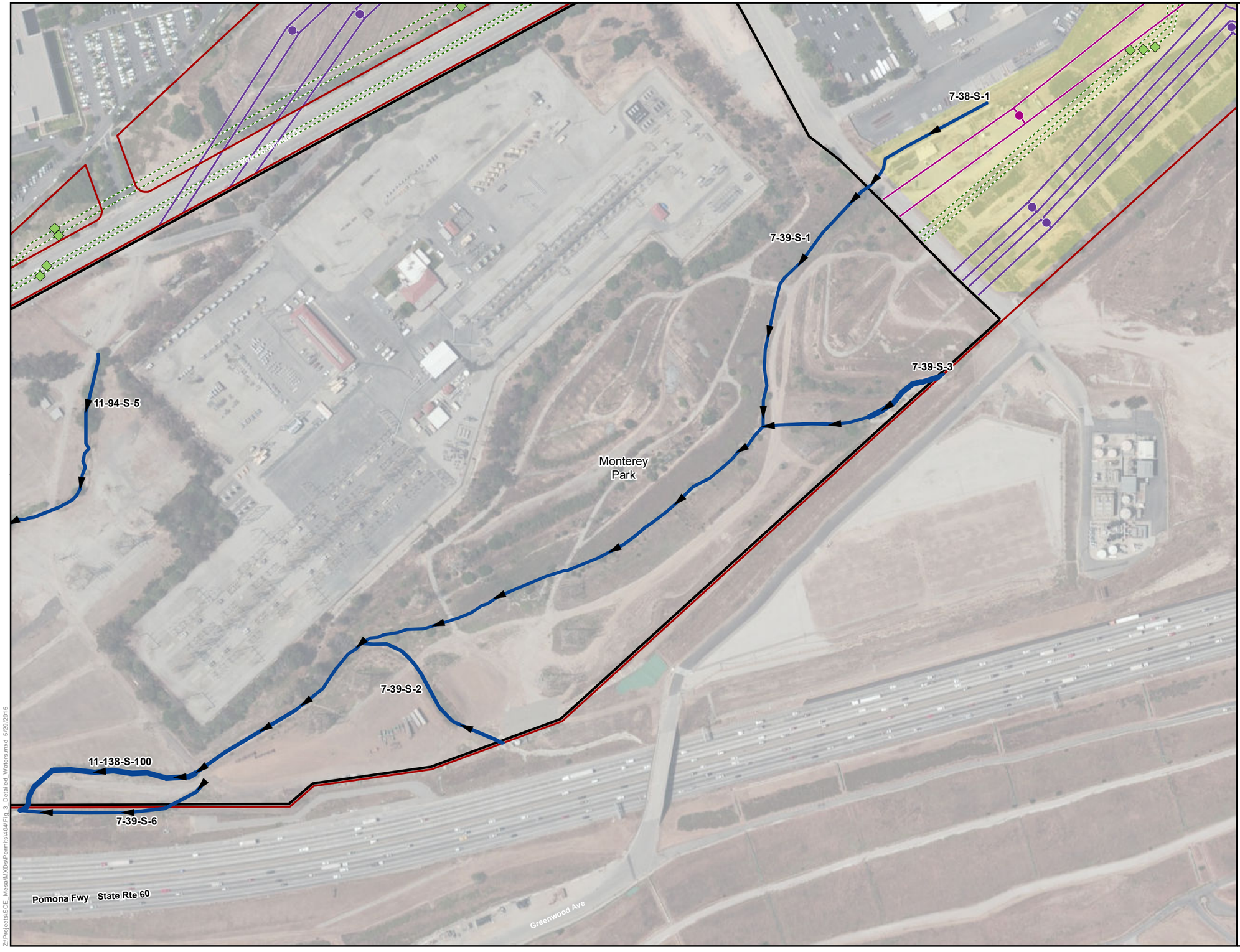
N

1:2,600
0 100 200 Feet

Z:\Projects\SCE_Mesa\MXD\Permits\404\Fig_3_Detailed_Waters.mxd 5/29/2015

Figure 4:
Impacts to Waters of the U.S.
Map 2 of 4

Mesa 500 kV Substation Project



- City Boundary

Jurisdictional Waters of the U.S.
- Rio Hondo (No Impacts)
- Water Permanently Impacted
- Water Temporarily Impacted
- Flow Direction

Project Components
- Project Area
- Mesa Substation Site
- Staging Yard

500 kV Transmission
- Proposed 500 kV Structure
- Proposed 500 kV Line

220 kV Transmission
- Proposed Temporary 220 kV Structure
- Proposed 220 kV Structure
- Proposed 220 kV Line

66 kV Subtransmission
- Proposed 66 kV Vault
- Proposed 66 kV Structure
- Proposed Underground 66 kV Line
- Proposed Overhead 66 kV Line

Telecommunications
- Proposed Vault/Manhole
- Existing Pole
- Proposed Overhead (On Existing Facilities)
- Proposed Underground
- Re-Route Overhead
- Re-Route Underground

16 kV Distribution
- Proposed 16 kV Vault
- Proposed 16 kV Pole
- Proposed 16 kV Underground Line
- Re-Route 16 kV Underground Line (In Existing Facilities)

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

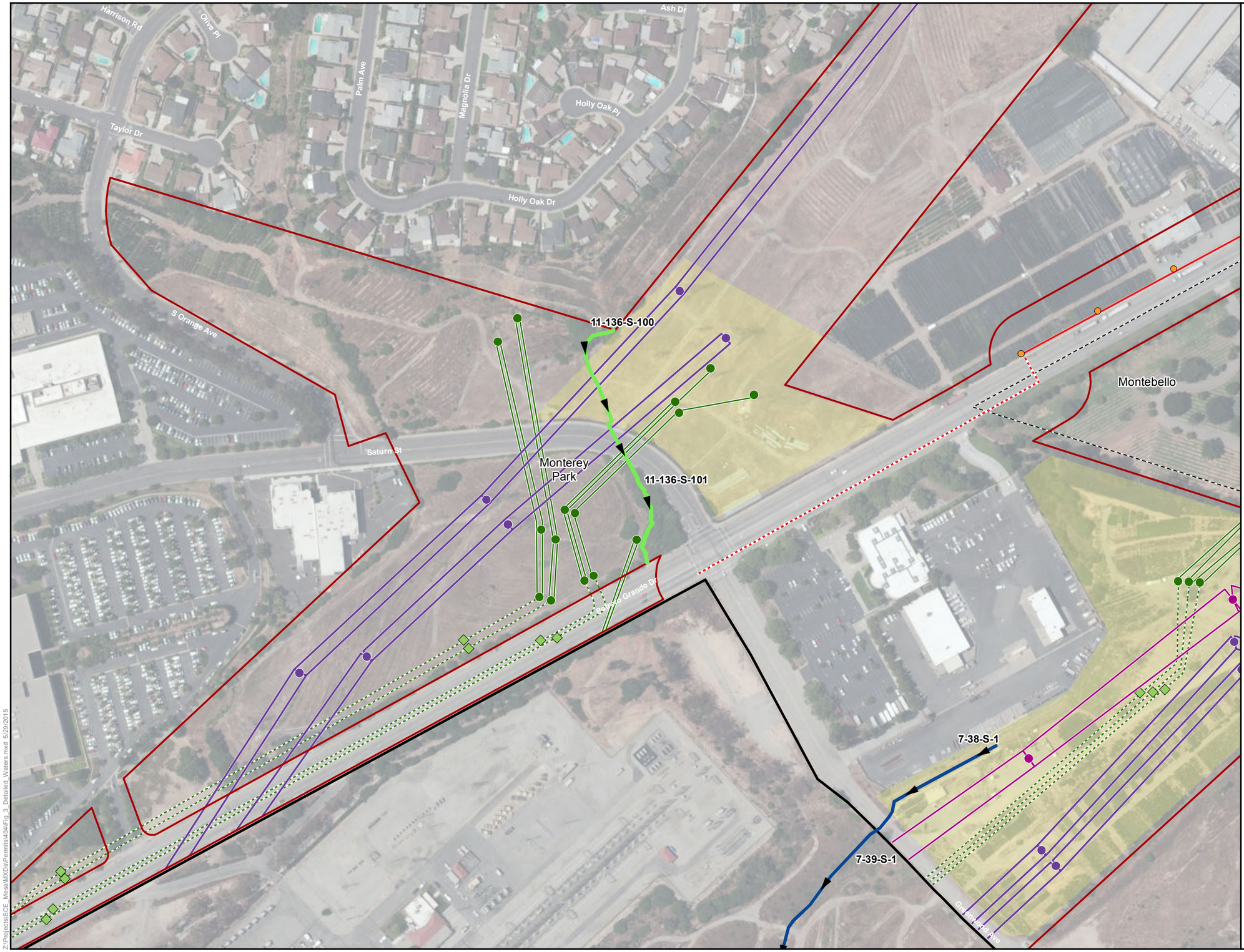
N

1:2,600
0 100 200 Feet

Z:\Projects\SCE_MesaMXDs\Permits\404\Fig_3_Detailed_Waters.mxd 5/29/2015

Figure 4:
Impacts to Waters of the U.S.
Map 3 of 4

Mesa 500 kV Substation Project



- City Boundary

Jurisdictional Waters of the U.S.

- Rio Hondo (No Impacts)
- Water Permanently Impacted
- Water Temporarily Impacted
- Flow Direction

Project Components

- Project Area
- Mesa Substation Site
- Staging Yard

500 kV Transmission

- Proposed 500 kV Structure
- Proposed 500 kV Line

220 kV Transmission

- Proposed Temporary 220 kV Structure
- Proposed 220 kV Structure
- Proposed 220 kV Line

66 kV Subtransmission

- Proposed 66 kV Vault
- Proposed 66 kV Structure
- Proposed Underground 66 kV Line
- Proposed Overhead 66 kV Line

Telecommunications

- Proposed Vault/Manhole
- Existing Pole
- Proposed Overhead (On Existing Facilities)
- Proposed Underground
- Re-Route Overhead
- Re-Route Underground

16 kV Distribution

- Proposed 16 kV Vault
- Proposed 16 kV Pole
- Proposed 16 kV Underground Line
- Re-Route 16 kV Underground Line (In Existing Facilities)

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:2,600

0 100 200 Feet

Z:\Projects\SCE_Mesa\MXDs\Permits\404\Fig_3_Detailed_Waters.mxd 5/29/2015

Figure 4:
Impacts to Waters of the U.S.
Map 4 of 4

Mesa 500 kV Substation Project

City Boundary

Jurisdictional Waters of the U.S.
- Rio Hondo (No Impacts)
- Water Permanently Impacted
- Water Temporarily Impacted
- Flow Direction

Project Components
- Project Area
- Mesa Substation Site
- Staging Yard

500 kV Transmission
- Proposed 500 kV Structure
- Proposed 500 kV Line

220 kV Transmission
- Proposed Temporary 220 kV Structure
- Proposed 220 kV Structure
- Proposed 220 kV Line

66 kV Subtransmission
- Proposed 66 kV Vault
- Proposed 66 kV Structure
- Proposed Underground 66 kV Line
- Proposed Overhead 66 kV Line

Telecommunications
- Proposed Vault/Manhole
- Existing Pole
- Proposed Overhead (On Existing Facilities)
- Proposed Underground
- Re-Route Overhead
- Re-Route Underground

16 kV Distribution
- Proposed 16 kV Vault
- Proposed 16 kV Pole
- Proposed 16 kV Underground Line
- Re-Route 16 kV Underground Line (In Existing Facilities)

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:2,600
0 100 200 Feet

Z:\Projects\SCE_Mesa\MXDs\Permits\404\Fig_3_Detailed_Waters.mxd 5/29/2015

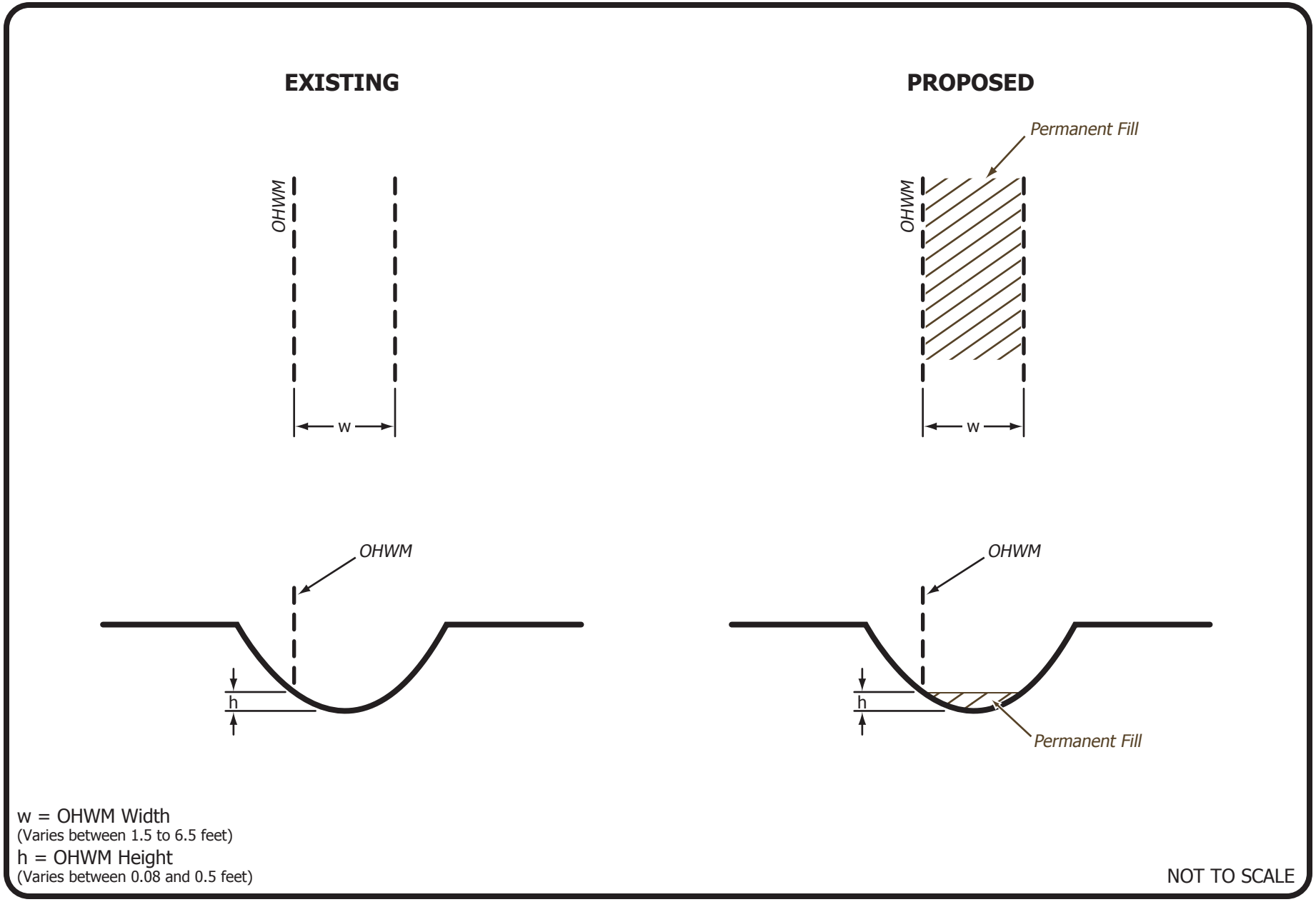


Figure 5: Impacts to Waters of the U.S.: Typical Plan and Cross-Section Drawing

ATTACHMENT C: PHOTOGRAPHS OF IMPACTED WATER FEATURES

ATTACHMENT C: PHOTOGRAPHS OF IMPACTED WATER FEATURES

Photograph 1:
Overview of ephemeral drainage 7-39-S-5, facing upstream/east.

Photograph 2:
Overview of ephemeral drainage 7-39-S-5, facing downstream/west.

Photograph 3: Ephemeral drainage 7-39-S-5, facing upstream/east.

Photograph 4: Ephemeral drainage 7-39-S-5, facing downstream/west.

Photograph 5: Ephemeral drainage 11-94-S-5, facing downstream/west.

Photograph 6: Ephemeral drainage 11-94-S-5, facing south.

Photograph 7: Ephemeral drainage 11-138-S-100, western portion facing upstream/north.

Photograph 8: Ephemeral drainage 11-138-S-100, facing upstream/east.

Photograph 9: Ephemeral drainage 11-138-S-100, facing downstream/west.

Photograph 10: Confluence of ephemeral drainages 7-39-S-6 and 11-138-S-100, facing downstream/west.

Photograph 11:
Ephemeral drainage 7-39-S-6, facing upstream/northeast.

Photograph 12:
Ephemeral drainage 7-39-S-6, facing downstream/southwest.

Photograph 13:
Off-site continuation of ephemeral drainage 7-39-S-6, facing upstream/east.

Photograph 14:
Off-site continuation of ephemeral drainage 7-39-S-6 and culvert under State Route (SR-) 60, facing downstream/west.

Photograph 15: Ephemeral drainage 7-39-S-1, facing downstream/west.

Photograph 16: Ephemeral drainage 7-39-S-1, facing downstream/west.

Photograph 17: Ephemeral drainage 7-39-S-1, facing upstream/northeast.

Photograph 18: Ephemeral drainage 7-39-S-1, facing downstream/southwest.

Photograph 19: Ephemeral drainage 7-39-S-2, facing downstream/northwest.

Photograph 20: Ephemeral drainage 7-39-S-2, facing upstream/southeast.

Photograph 21: Ephemeral drainage 7-39-S-3, taken from above the culvert, facing downstream/west.

Photograph 22: Ephemeral drainage 7-39-S-3, facing the culvert and upstream/east.

Photograph 23: Culvert at upstream portion of ephemeral drainage 11-136-S-101, facing north.

Photograph 24: Ephemeral drainage 11-136-S-101, facing downstream/south.

Photograph 25: Upstream portion of ephemeral drainage 7-38-S-1, taken from west side of Greenwood Road, facing upstream/east.

Photograph 26: Ephemeral drainage 11-136-S-100, facing upstream/north.

Photograph 27: Ephemeral drainage 11-136-S-100, facing downstream/south.

Photograph 28: Northern dirt-lined portion of ephemeral drainage 11-136-S-100, facing upstream/north.

Photograph 29: Northern dirt-lined portion of ephemeral drainage 11-136-S-100, facing downstream/south.

Photograph 30: Intermittent drainage 7-39-S-11 (Rio Hondo), facing upstream/northeast.

Photograph 31: Intermittent drainage 7-39-S-11 (Rio Hondo), facing downstream/southwest.

ATTACHMENT D: PROTOCOL SURVEYS FOR COASTAL CALIFORNIA GNATCATCHER

ROCKS
BIOLOGICAL CONSULTING

June 2, 2015

U.S. Fish and Wildlife Service
Attn: Stacey Love
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

Subject: 45-day Report for Protocol Coastal California Gnatcatcher Surveys for the Proposed Southern California Edison Mesa 500 kilovolt Substation Project, Los Angeles County, California

Ms. Love:

This letter presents the 45-Day Report for U.S. Fish and Wildlife Service (USFWS) protocol breeding season surveys for the coastal California gnatcatcher (CAGN; *Polioptila californica californica*). Surveys were conducted for the proposed Southern California Edison (SCE) Mesa 500 kilovolt (kV) Substation Project (project) in Los Angeles County, California. Rocks Biological Consulting (RBC) performed the surveys described in this report under contract to Insignia Environmental.

The project is located primarily in the City of Monterey Park, with other project features within unincorporated areas of Los Angeles County and Montebello, Rosemead, South El Monte, Commerce, Bell Gardens, and Pasadena, California. The project is within the El Monte and Los Angeles U.S. Geological Survey (USGS) 7.5-minute series quadrangle maps (Figure 1). These surveys were performed in support of a Biological Assessment (BA) for a formal Section 7 consultation with the USFWS.

The 2015 CAGN survey area was determined by creating a 150-foot buffer around all project features using a Geographic Information System (GIS) and surveying all suitable CAGN habitat within the buffer. Suitable CAGN habitat observed within or immediately adjacent to the buffer area included moderate and high quality coastal sage scrub (CSS), disturbed/fragmented CSS, revegetated CSS, and ruderal, weedy areas in close proximity to CSS. The dominant species within suitable habitat included California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), lemonadeberry (*Rhus integrifolia*), and laurel sumac (*Malosma laurina*).

Non-suitable habitats within the project area included developed areas, highly disturbed areas with low-growing annual vegetation, dirt roads, agricultural fields, and riparian habitat and ornamental vegetation that are not immediately adjacent to CSS.

5101 SEPTEMBER STREET ● SAN DIEGO, CA 92110-1118
619.508.3803 ● LEE@ROCKSBIO.COM

Survey methodology followed the USFWS presence/absence survey protocol (1997) for non-NCCP areas, which requires six (6) protocol surveys be conducted during the CAGN breeding season (March 15 – June 30). Surveyors Lee Ripma (TE–221290–3.1) and Garrett Huffman (TE–20168A–0) conducted the surveys weekly across approximately 80 acres of suitable habitat at a rate of approximately 8 acres/hour. Taped vocalizations were used sparingly to elicit a CAGN response and were ceased upon hearing or observing a CAGN.

Please see Table 1 for survey dates, times, and conditions. The attached figures (1–3E) show the survey area, survey route, and location of observed CAGN. A list of the 56 bird species observed during the survey is included as Appendix A.

Table 1. Survey Conditions During California Gnatcatcher Surveys at the Proposed Southern California Edison Mesa 500 kilovolt Substation Project, Los Angeles County, California

CAGN Survey	Date	Surveyor	Time (Start-End)	Temp F (Start-End)	Cloud Cover (Start-End)	Wind Range in mph (Start-End)
#1	4/9/2015	Lee Ripma	0630-1155	52.7-78.7	20-0	0-1, 2-4
#1	4/10/2015	Lee Ripma	0640-1158	51.7-75.5	30-40	0-2, 1-3
#2	4/17/2015	Garrett Huffman	0600-1200	55-87	0-0	1-2, 1-3
#2	4/17/2015	Lee Ripma	0605-1105	54.8-72.4	0-0	1-3, 0-2
#3	4/23/2015	Garrett Huffman	0600-1200	57-73	70-60	0-2, 1-3
#3	4/24/2015	Lee Ripma	0550-1045	56.8-64.2	90-100	0-2, 1-3
#4	4/30/2015	Lee Ripma	0605-1145	57.8-95.5	5-30	0-2, 2-4
#4	5/1/2015	Lee Ripma	0610-1135	56.1-88.2	25-15	0-1, 2-4
#5	5/7/2015	Lee Ripma	0610-1150	60.5-71.3	95-90	0-1, 2-5
#5	5/8/2015	Lee Ripma	0615-1140	50.4-66.7	30-95	2-4, 0-2
#6	5/14/2015	Lee Ripma	0620-1155	59.6-71.2	60-100	0-1, 0-2
#6	5/15/2015	Lee Ripma	0610-1200	52.9-62.9	100-95	0-1, 2-4

Two pairs of CAGN were observed nesting within approximately 550 feet of each other at the Mesa Substation site (Figure 3A). During surveys 1–3, both pairs were observed in various stages of nest building, incubation, and/or caring for nestlings. During surveys 4–6, the two pairs were observed tending to their fledges. One pair had three fledges foraging with them and the other had two.

In addition CAGN were observed along the associated transmission, subtransmission, distribution, and telecommunications line areas (Figures 3B–3E). Four pairs of CAGN were consistently observed within the high quality CSS along the north side of Lincoln Avenue at the

base of the Montebello Hills oilfield (Figure 3C). The CSS in this area is USFWS-designated critical habitat for CAGN. These four CAGN pairs were observed on all six surveys in the same locations. Due to restricted access on private property, actual nests were not observed during surveys; however, all four CAGN pairs exhibited nesting behavior and three CAGN pairs were observed with fledges during later surveys. As such, three of these four pairs are mapped as CAGN nesting pairs with fledges and one is mapped as a nesting CAGN pair on Figure 3C.

In addition, one adult and one juvenile were observed foraging together south of N. Durfee Ave. during the final survey, but no nesting activity was observed during the first five surveys (Figure 3D). It is likely that these CAGN are primarily using the suitable habitat south of the survey area and occasionally forage in this area. This portion of the alignment is also within critical habitat for CAGN.

In summary, a total of six pairs of CAGN were observed nesting or exhibiting nesting behavior within the survey area during the 2015 breeding season surveys. One adult and one juvenile were also observed foraging within the survey area, but nesting behavior was not observed.

Please feel free to call me at (619) 508-3803 should you have any questions or concerns.

We certify that the information in this survey report and attached figures fully and accurately represent our work.

Sincerely,

Lee Ripma
TE-221290-3.1

Garrett Huffman
TE-20168A-0

Enclosures: Appendix A – Bird Species Observed
Figure 1 – USGS Quadrangle Map
Figure 2 – Coastal California Gnatcatcher Survey Area Overview
Figures 3A – 3E - Coastal California Gnatcatcher 2015 Survey Results

Appendix A. Bird Species Observed During Coastal California Gnatcatcher Protocol Surveys at the Proposed Southern California Edison Mesa 500 kilovolt Substation Project, Los Angeles County, California

Common Name	Scientific Name
Allen's hummingbird	*Selasphorus sasin*
American kestrel	*Falco sparverius*
Anna's hummingbird	*Calypte anna*
ash-throated flycatcher	*Myiarchus cinerascens*
Bewick's wren	*Thryomanes bewickii*
black phoebe	*Sayornis nigricans*
black-headed grosbeak	*Pheucticus melanocephalus*
blue grosbeak	*Passerina caerulea*
brown-headed cowbird*	*Molothrus ater*
bushtit	*Psaltriparus minimus*
cactus wren	*Campylorhynchus brunneicapilus*
coastal California gnatcatcher	*Polioptila californica californica* (FT)
California quail	*Callipepla californica*
California thrasher	*Toxostoma redivivum*
California towhee	*Melozone crissalis*
Cassin's kingbird	*Tyrannus vociferans*
cedar waxwing	*Bombycilla cedrorum*
cliff swallow	*Petrochelidon pyrrhonota*
common raven	*Corvus corax*
common yellowthroat	*Geothlypis trichas*
Cooper's hawk	*Accipiter cooperii* (WL)
double-crested cormorant	*Phalacrocorax auritus*
European starling*	*Sturnus vulgaris*
great blue heron	*Ardea herodias*
great egret	*Ardea alba*
great-tailed grackle	*Quiscalus mexicanus*
hooded oriole	*Icterus cucullatus*
house finch	*Carpodacus mexicanus*
house wren	*Troglodytes aedon*
killdeer	*Charadrius vociferus*
Lazuli bunting	*Passerina amoena*
least Bell's vireo	*Vireo bellii pusillus* (FE, SE)
lesser goldfinch	*Spinus psaltria*
mallard	*Anas platyrhynchos*
mourning dove	*Zenaida macroura*
northern mockingbird	*Mimus polyglottos*
northern rough-winged swallow	*Stelgidopteryx serripennis*
Nuttall's woodpecker	*Picoides nuttallii*
orange-crowned warbler	*Oreothlypis celata*
pacific-slope flycatcher	*Empidonax difficilis*
phainopepla	*Phainopepla nitens*

red-tailed hawk	*Buteo jamaicensis*
rock pigeon*	*Columba livia*
rufous hummingbird	*Selasphorus rufus*
Say's phoebe	*Sayornis saya*
song sparrow	*Melospiza melodia*
spotted towhee	*Pipilo maculatus*
Swainson's thrush	*Catharus ustulatus*
warbling vireo	*Vireo gilvus*
western kingbird	*Tyrannus verticalis*
western scrub-jay	*Aphelocoma californica*
western tanager	*Piranga ludoviciana*
white-throated swift	*Aeronautes saxatalis*
Wilson's warbler	*Cardellina pusilla*
yellow warbler	*Setophaga petechia* (SSC)
yellow-breasted chat	*Icteria virens* (SSC)

FE: Listed as Endangered by USFWS
FT: Listed as Threatened by USFWS
SE: Listed as Endangered by California Department of Fish and Wildlife
WL: California Department of Fish and Wildlife Watch List
SSC: California Department of Fish and Wildlife Species of Special Concern
*Introduced Species

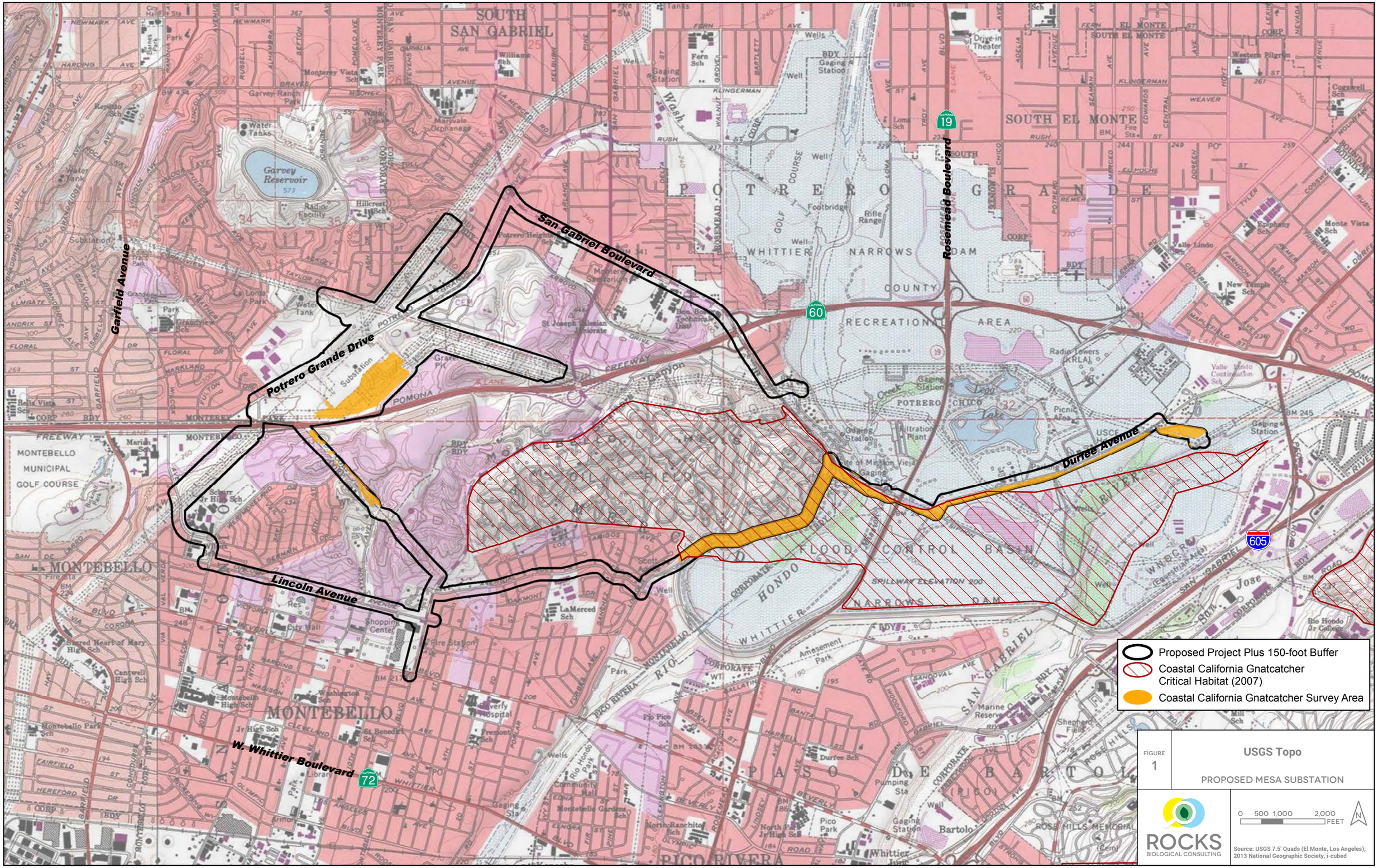


FIGURE 1

USGS Topo

PROPOSED MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 500 1,000 2,000 FEET

Source: USGS 7.5' Quads (El Monte, Los Angeles); 2013 National Geographic Society, i-cubed

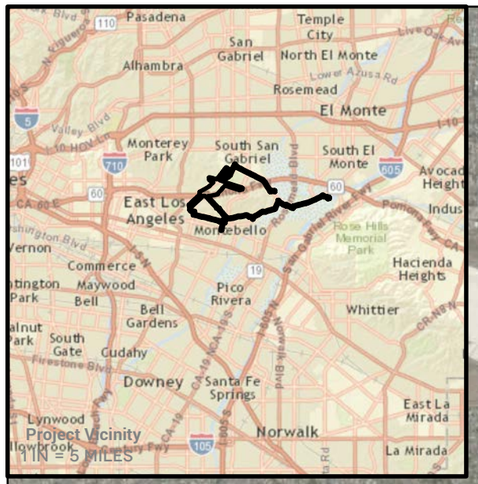


Fig. 3A

Fig. 3B

Fig. 3C

Fig. 3D

Fig. 3E

San Gabriel Boulevard

Rosemead Boulevard

Garfield Avenue

Potrero Grande Drive

Durfee Avenue

Lincoln Avenue

W. Whittier Boulevard

19

60

605

72

Proposed Project Plus 150-foot Buffer

Coastal California Gnatcatcher Critical Habitat (2007)

Coastal California Gnatcatcher Survey Area

2015 CAGN Nest

2015 CAGN Nesting Pair

2015 CAGN Nesting Pair with Fledges

2015 CAGN Observation (Not associated with a nest)

FIGURE 2

Coastal California Gnatcatcher Survey Area Overview

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 500 1,000 2,000 FEET

N

Source: Google, Esri

Google

FIGURE 3A

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 75 150 300 FEET

N

Source: Google

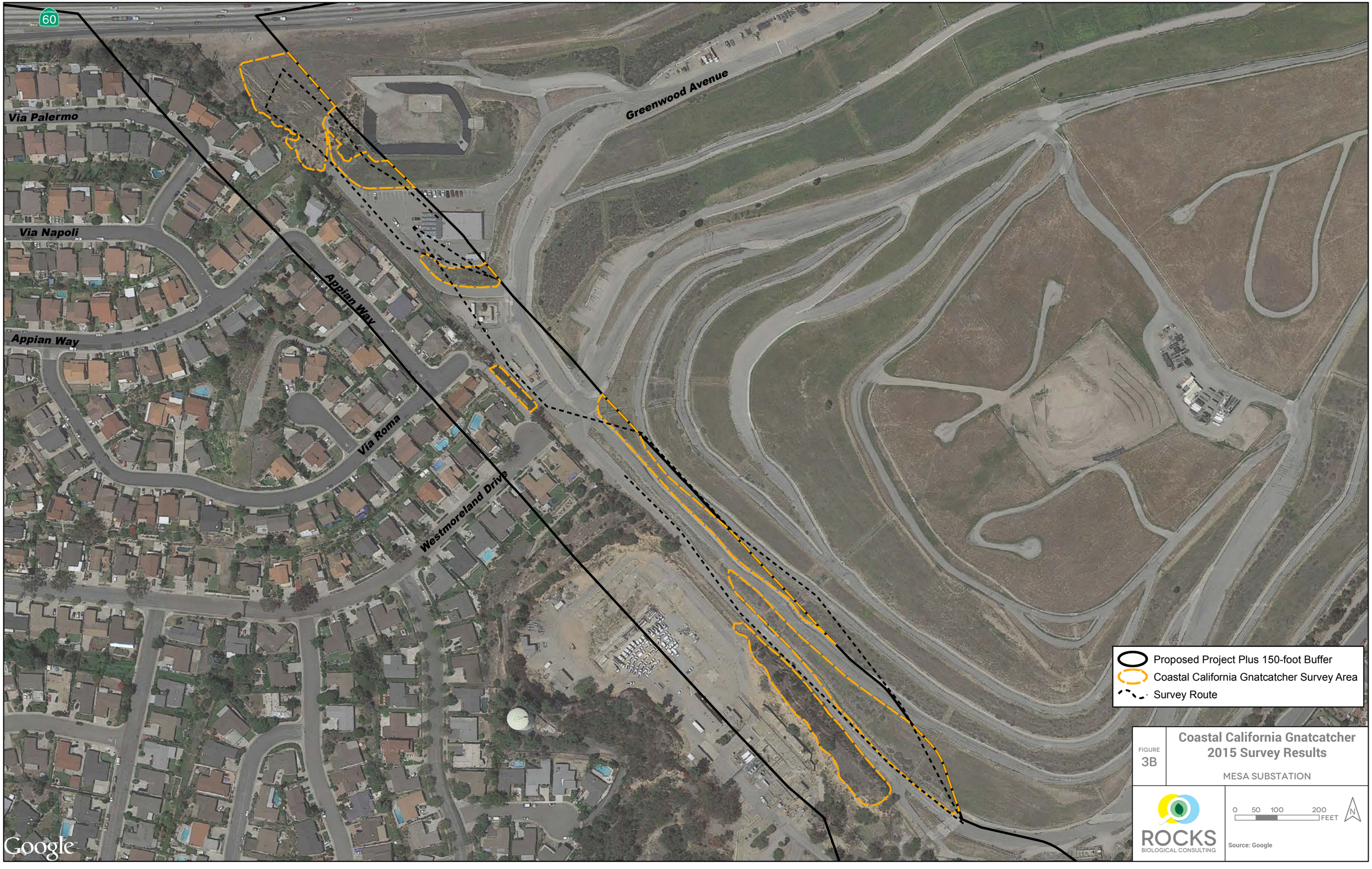


FIGURE 3B

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 50 100 200 FEET

N

Source: Google

FIGURE 3C

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 75 150 300 FEET

N

Source: Google

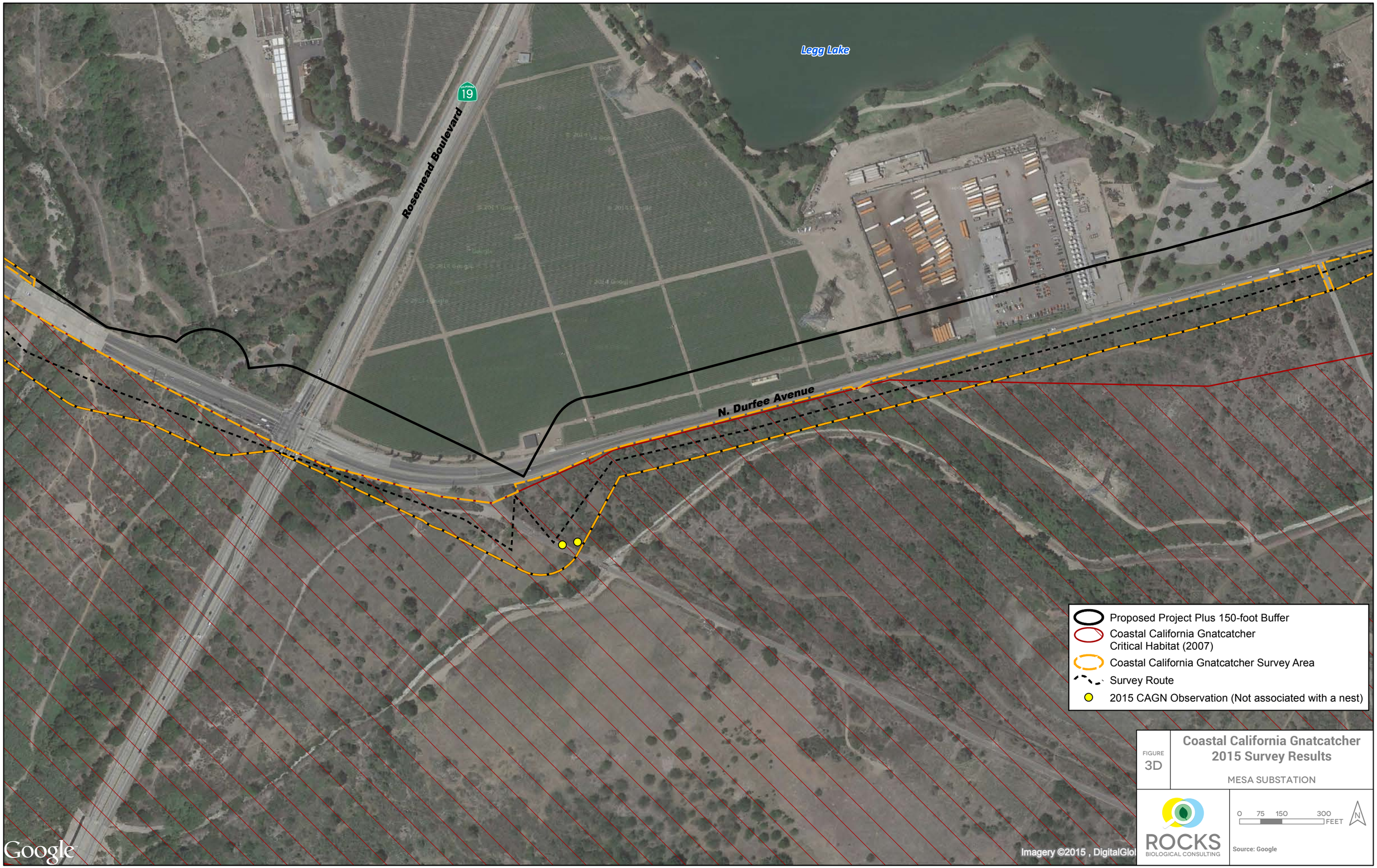


FIGURE 3D

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

FIGURE 3E

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 75 150 300 FEET

N

Source: Google

ATTACHMENT E: BIOLOGICAL ASSESSMENT

Biological Assessment

Mesa 500 kilovolt Substation Project

Los Angeles County, California

Prepared for
United States Army Corps of Engineers

Prepared by

INSIGNIA ENVIRONMENTAL

258 High Street
Palo Alto, CA 94301

On behalf of

SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

June 2015

TABLE OF CONTENTS

LIST OF ATTACHMENTS

LIST OF TABLES

LIST OF FIGURES

1.0 EXECUTIVE SUMMARY

1.1 Project Summary

Southern California Edison Company (SCE) proposes to construct the Mesa 500 kilovolt (kV) Substation Project (Project) to provide safe and reliable electrical service and to address reliability concerns resulting from the recent retirement of the San Onofre Nuclear Generation Station and from Once Through Cooling shutdowns expected by December 31, 2020. This Project will allow greater flexibility in the siting of future generation projects to meet local reliability needs in the Western Los Angeles Basin while reducing the total amount of new generation required by providing additional transmission import capability. Construction of the proposed Mesa Substation and demolition of the existing Mesa Substation will occur within the City of Monterey Park. Removal, relocation, modification, and/or construction of transmission, subtransmission, distribution, and telecommunications structures will occur within the cities of Monterey Park, Montebello, Rosemead, South El Monte, and Commerce, and in portions of unincorporated Los Angeles County. In addition, conversion of an existing street light source line from overhead to underground will take place within the City of Bell Gardens, and installation of a temporary 220 kV line loop-in at Goodrich Substation will occur within the City of Pasadena. Construction is anticipated to begin in June 2016 and end by December 31, 2020.

1.2 Purpose of the Biological Assessment

This biological assessment (BA) has been prepared in accordance with legal requirements set forth under Section 7 of the federal Endangered Species Act (ESA) (16 United States [U.S.] Code 1536[c]) to address the potential effects of the Project on federally listed threatened and endangered species, designated critical habitat, and proposed/candidate species for ESA protection. The U.S. Army Corps of Engineers (USACE) is the lead federal agency for the ESA Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS). Specifically, this BA addresses the potential effects associated with the construction of the Project on the coastal California Gnatcatcher (*Polioptila californica californica*), least Bell's Vireo (*Vireo bellii pusillus*), and Nevin's barberry (*Berberis nevinii*). The analysis has determined that the Project "may affect and is likely to adversely affect" the coastal California Gnatcatcher and will have no effect on least Bell's Vireo and Nevin's barberry (Table 1: *Determination of Effects*).

Least Bell's Vireo, a federally listed endangered species, is known to nest within riparian vegetation along the telecommunications route for the Project. Habitat exists near and adjacent to the telecommunications route in riparian areas associated with the Rio Hondo waterway. However, Project activity at this location will be limited to the existing roads, will not result in vegetation removal in riparian habitat, and will take place outside of the nesting season, which occurs from approximately March 1 through August 31. Therefore, work along the telecommunications route will have no effect on least Bell's Vireo.

On the Mesa Substation site, south of the existing Mesa Substation, ephemeral drainages support sparse mulefat scrub, but are primarily dominated by non-native and ornamental plant species. The plant communities associated with the ephemeral drainages south of Mesa

Substation are either non-native, non-habitat, or are characterized by riparian scrub that is too small, patchy, and/or marginal habitat for least Bell's Vireo. Further, least Bell's Vireo was not identified on the Mesa Substation site during four years of monitoring for the Tehachapi Renewable Transmission Project (TRTP) which is adjacent to and overlaps with portions of the Project. For these reasons, it has been determined that the Project will have "no effect" on least Bell's Vireo and this species is not discussed further.

Table 1: Determination of Effects

Species	Federal Listing Status	Determination	Details
Coastal California Gnatcatcher (*Polioptila californica californica*)	Threatened	May Affect, Likely to Adversely Affect	Direct impacts are expected to be minimized through the implementation of minimization and monitoring measures detailed in Section 3.2 Minimization and Monitoring Measures of this BA
Least Bell's Vireo (*Vireo bellii pusillus*)	Endangered	No Effect	No impacts
Nevin's barberry (*Berberis nevinii*)	Endangered	No Effect	No impacts

Nevin's barberry, a federally listed endangered species, has been identified at the Whittier Narrows Natural Area within the Project area. One individual shrub of this species appears to have been planted as part of a demonstration garden. Work at this location will be limited to stringing overhead lines, which will not require any ground disturbance in the vicinity of this species' location. Work within the area of this shrub will be limited to walking new overhead cables between poles and climbing the poles to install the cables. This individual shrub will be flagged and avoided during work within this area. For these reasons, it has been determined that the Project will have "no effect" on Nevin's barberry and this species is not discussed further.

2.0 PROJECT DESCRIPTION

2.1 Regional Setting

The Project is located within the northwestern portion of the Peninsular Ranges geomorphic province in the foothills of the San Gabriel Mountains, near where the Peninsular and Transverse ranges meet. The Project spans the San Gabriel Valley, and the terrain surrounding the Project ranges from level ground to rolling foothills. The Project is situated at elevations ranging from 130 feet to 750 feet above mean sea level. The Project is located in the California Floristic Province, as described in *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012). In addition, the Project is situated within the Los Angeles River watershed.

2.2 Project Area

The Project overlaps with portions of Segments 7, 8, 9, and 11 of the TRTP. SCE is currently constructing the TRTP to provide the electrical facilities necessary to interconnect new wind turbine-based electrical generation from the Tehachapi Wind Resource Area. The TRTP consists of a series of new and upgraded high-voltage transmission lines and substation facilities that will deliver electricity from renewable wind energy generators in eastern Kern County, California to the Los Angeles Basin. The TRTP consists of eight segments—Segment 4 through Segment 11. The Mesa Substation site includes the southern portion of Segment 11, the southwestern portion of Segment 7, and the northwestern portion of Segment 8. In addition, Segment 9 includes an upgrade to Mesa Substation. The former TRTP laydown area was located within the Mesa Substation site. Additional work areas within the Mesa Substation site, including the southwestern portion of the site, do not overlap with TRTP.

The Project is located within Los Angeles County, California in the cities of Monterey Park, Montebello, Rosemead, South El Monte, Commerce, Bell Gardens, and Pasadena, as well as in unincorporated portions of Los Angeles County (Figure 1: *Overview and Action Area*). The construction of Mesa Substation will occur in the City of Monterey Park. The City of Monterey Park is generally urban and developed with a few areas of open space or parkland. Land uses in the area surrounding the Project are industrial and commercial to the north, State Route (SR-) 60 to the south, the SCE Montebello Service Center to the east, the Resurrection Cemetery to the northeast, and low-density residential and commercial zones to the west.

A large retail shopping center—Monterey Park Market Place—is currently in the entitlement phase and is proposed to be located directly east of the Project site on the Operating Industries, Inc. (OII) Landfill. A portion of the SCE right-of-way (ROW) south of the existing Mesa Substation has a restricted use covenant with the California Department of Toxic Substances Control, enforced by the Environmental Protection Agency (EPA). As such, no grading or vegetation removal will occur for this Project within this restricted use area.

The proposed telecommunications route is located in the City of Montebello; however, portions of the telecommunications route are within the cities of Monterey Park, Rosemead, South El Monte, and unincorporated areas of Los Angeles County, including the community of South San Gabriel. The transmission, subtransmission, distribution, and telecommunications work will occur within existing SCE ROWs on existing overhead lines and conduits. The following three telecommunications routes will travel along existing lines and conduits:

- The first route will extend east of Mesa Substation along Potrero Grande Drive and then south along San Gabriel Boulevard before ending at an existing lattice steel tower (LST) adjacent to the Rio Hondo waterway.

- The second route—a cutoff route—will extend south of Mesa Substation along the edge of an existing landfill, through a residential area, and then south along North Montebello Boulevard where it will connect to the third route.

- The third route will extend west of Mesa Substation along Markland Drive and a wide ROW before turning south along Wilcox Avenue. It will then travel in an eastward direction along Lincoln Avenue, North Montebello Boulevard, and Avenida de la Merced, and finally southeast along San Gabriel Boulevard/Durfee Avenue where it will cross the Rio Hondo waterway and terminate at an LST near the channel that connects the San Gabriel River to the Rio Hondo waterway.

The area surrounding the telecommunications route in the cities of Monterey Park, Montebello, and Rosemead and in the community of South San Gabriel predominately consists of industrial, commercial, and residential uses, which includes the Don Bosco Technical Institute. An approximately 1.1-mile portion of the telecommunications route will be located within the Whittier Narrows Natural Area, which is located within unincorporated areas of Los Angeles County and an approximately 160-foot segment within the City of South El Monte. Whittier Narrows Natural Area includes property owned by the USACE and managed by the Los Angeles County Department of Parks and Recreation. The existing land in the vicinity of Whittier Narrows is characterized by native habitat and crosses the Whittier Narrows Recreation Area, the Whittier Narrows Water Reclamation Plant, the USACE Los Angeles District offices, commercial and residential uses, an agricultural field used for strawberries, and a trucking storage yard.

A staging area will be located within an existing ROW east of Mesa Substation, and will be bordered by a third-party landscape nursery, a cemetery, and residential uses to the northeast, and by a vacant former landfill and SR-60 to the south. A staging area will be located to the southwest of Mesa Substation within an existing ROW, and will be bordered by SR-60 to the north, Schurr High School to the south and east, a third-party landscape nursery to the southwest, and a shopping center to the west.

Within the City of Commerce, an existing transmission tower will be replaced within an SCE ROW approximately 2.1 miles north of Laguna Bell Substation and approximately 2.4 miles southwest of Mesa Substation. Within the City of Bell Gardens, a source line connecting three existing streetlights will be converted from an overhead to underground configuration approximately 0.2 mile south of Laguna Bell Substation. The installation of a temporary 220 kV line loop-in at Goodrich Substation will be located in the City of Pasadena. The proposed work within the cities of Commerce, Bell Gardens, and Pasadena consist of improvements within existing developed or ruderal lands and will not impact biological resources; therefore, Project elements within the cities of Commerce, Bell Gardens, and Pasadena are not further discussed in this BA.

2.3 Project Study Area

The Project study area to assess the biological resources for the Project is defined as the locations where work may be performed, as described in Section 2.2 Project Area, plus a 100-foot buffer. The study area represents the potential disturbance area associated with work at the substation and the associated transmission, subtransmission, distribution, and

telecommunications lines. The study area for the Project coincides with areas investigated in the course of preparing the Proponent's Environmental Assessment for the Project (SCE 2015).

2.4 Project Action Area

For the purpose of this BA, the Project action area is defined as all areas that may be affected, directly or indirectly, by the Project activities for which SCE is requesting take coverage. The action area includes the Project area (and the associated potential direct impacts to federally listed species), plus a 100-foot buffer (and the associated potential indirect impacts to those species) (Figure 1: *Overview and Action Area*). The "action area" is legally described in the implementing regulations of Section 7(a)(2) of the ESA as all areas affected directly or indirectly by the federal action and not merely the immediate area affected by the Project (50 Code of Federal Regulations § 402.02). The action area is the area of potential direct or indirect effects of the proposed action and any interrelated or interdependent human activities, and the direct and indirect effects of these activities include associated physical, chemical, and/or biological effects of considerable likelihood (USFWS and National Oceanic and Atmospheric Administration National Marine Fisheries Service [NOAA Fisheries] 1998).

Based on a review of the USFWS Conservation Plans and Agreements Database (USFWS 2013) and the California Department of Fish and Wildlife (CDFW) Natural Community Conservation Planning (NCCP) program (CDFW 2013), it was determined that the Project is not located in areas with Habitat Conservation Plan or NCCP coverage.

3.0 PROPOSED ACTION

Land disturbance will include all areas affected by construction of the Project. It is estimated that the total permanent land disturbance for the Project will be approximately 76.7 acres, and approximately 141.4 acres will be temporarily disturbed (Table 2: *Project Estimated Land Disturbance*). Approximately 20 acres of on-site vegetation will be removed during the clearing, grubbing, and grading for the construction of the proposed Mesa Substation, including trees along the frontage and within the fence line of the existing Mesa Substation site.

SCE anticipates that construction of the Project will take approximately 56 months. Construction of the Project is anticipated to begin in June 2016, and the substation will be completed and energized in December 2020. Construction will commence following approval from the California Public Utilities Commission (CPUC), final engineering, procurement activities, land rights acquisition, and receipt of all applicable permits.

Table 2: Project Estimated Land Disturbance

Project Feature	Approximate Area Disturbed During Construction (acres)	Approximate Area Temporarily Disturbed (acres)	Approximate Area Permanently Disturbed (acres)
Mesa Substation	82.9	13.5	69.4
Transmission Project Features	17.7	17.1	0.6
Subtransmission Project Features	13.9	13.9	<0.1
Telecommunications Project Features	0.8	0.8	<0.1
Distribution	0.5	0.5	<0.1
Staging Areas	11.3	11.3	0.0
Access Roads and/or Spur Roads	26.2	19.6	6.6
General Disturbance	64.7	64.7	0.0
Total Estimated for Project	**218.0**	**141.4**	**76.7**

Notes:

1. Disturbance calculations presented for the transmission, subtransmission, distribution, and telecommunications structures only account for areas outside of the approximately 69.4-acre Mesa Substation site. All disturbance within the Mesa Substation site has been attributed to this Project component. Due to the proximity of the Project components, overlapping portions of the work areas have been removed in the Approximate Area Disturbed During Construction column.
2. This table includes the removal of existing conductors, teardown of existing structures, and the removal of foundations to at least 2 feet below ground surface.
3. This table includes structure assembly and erection, and conductor and overhead optical ground wire installation. Permanently disturbed areas will measure approximately 0.25 acre for LSTs, and 0.06 acre for tubular steel poles (TSPs).
4. This table is based on the approximate length of roads in miles, with a drivable road width of approximately 14 feet and an approximately 2-foot berm on each side.
5. This table includes improving existing roads to current standards. It also assumes an existing improved road width of approximately 10 feet and an additional width of 4 feet, plus an approximately 2-foot berm on each side of the road.
6. The disturbed acreage calculations are estimates based on SCE's preferred area of use for the described Project feature, the width of the existing ROW, or the width of the proposed ROW.
7. Staging area acres and locations subject to change based on availability.

3.1 Project Components and Construction Description

Project Components

The main activity associated with the Project involves the construction of an approximately 69.4-acre, 500/220/66/16 kV substation (i.e., Mesa Substation) in place of the existing, approximately 21.6-acre, 220/66/16 kV Mesa Substation on approximately 86.2 acres of SCE fee-owned property. Construction of the proposed Mesa Substation will occur in phases, and a new 220/66/16 kV switchrack will be built next to the existing switchrack (to ensure that power is not lost from the existing substation), and the existing 220/66/16 kV structures will be demolished to accommodate the 500/220/66/16 kV switchracks.

SCE currently operates various 220 kV transmission lines, 66 kV subtransmission lines, 16 kV distribution lines, and telecommunications lines that connect to the existing Mesa Substation. As part of the Project, SCE will replace existing structures and lines, as necessary, to allow these existing circuits to connect to the proposed Mesa Substation configuration. In addition, the Project involves the loop-in of one existing 500 kV circuit and two existing 220 kV circuits, which currently pass by the existing Mesa Substation property on various 500 kV transmission lines and 220 kV transmission lines. The Project includes the following elements:

- Mesa Substation: Construct the 500/220/66/16 kV Mesa Substation. This substation will be constructed on the existing 220/66/16 kV Mesa Substation site. Mesa Substation will be a staffed, automated substation operating at 3,360 megavolt-ampere (MVA) at 500/220 kV, 840 MVA at 220/66 kV, and 56 MVA at 66/16 kV, with a potential capacity of 4,480 MVA at 500/220 kV, 1,120 MVA at 220/66 kV, and 112 MVA at 66/16 kV at ultimate build-out.

- Transmission lines immediately adjacent to Mesa Substation: Remove, relocate, and construct new transmission, subtransmission, and distribution structures within existing SCE transmission and substation fee-owned properties, ROWs, and franchise areas to accommodate the new Mesa Substation configuration.

- Telecommunications routes: Install new telecommunications lines and remove old telecommunications lines on existing subtransmission and distribution structures.

- Staging areas: Temporary areas in support of construction activities.

- Access roads: Potential improvements to existing access roads.

Mesa Substation

The areas directly adjacent to Mesa Substation—which include areas included in the description of the transmission lines—will be graded, and vegetation will be removed prior to construction.

Brief Description of Major Elements

Mesa Substation will be a 500/220/66/16 kV staffed, automated substation, operating at 3,360 MVA at 500/220 kV, 840 MVA at 220/66 kV, and 56 MVA at 66/16 kV. The substation capacity will have the potential to expand to 4,480 MVA at 500/220 kV, 1,120 MVA at 220/66 kV, and 112 MVA at 66/16 kV, as necessary. The proposed Mesa Substation will be constructed on approximately 69.4 acres within approximately 86.2 acres of SCE fee-owned property. The existing Mesa Substation occupies approximately 21.6 acres within the same approximately 69.4-acre area where the proposed Mesa Substation will be constructed. The dimensions of the substation parcel and the placement and orientation of the major components that will be included in the construction of Mesa Substation have been included in this BA (Figure 2: *Proposed Substation Layout*).

The monitoring equipment for the operation of Mesa Substation and portions of the SCE system will be located in a permanent Operations Building structure that will typically be a pre-engineered metal building shell. SCE anticipates the Operations Building will have prefinished metal panel exterior walls in earth-tone colors; green-tinted, glazed windows; and metal doors painted to match the metal siding of the adjacent exterior building. An exterior patio will be constructed at the northeast corner with translucent roof panels and perforated metal panel windscreens. The Operations Building will measure approximately 100 feet wide, 150 feet long, and 25 feet high. Several ancillary facilities will also be built, including two Mechanical and Electric Equipment Rooms and an approximately 35-foot-tall Test and Maintenance Building with restrooms.

In the event of a fire on the substation site, water provided by firefighting efforts will flow toward the detention pond in the southwest corner of the substation site (Figure 2: *Proposed Substation Layout*). The detention pond will be approximately one acre with a capacity of approximately 455,000 gallons, and will be constructed from mulch, gravel, soil, and geotextile membrane layers. In the event of a fire within the 500/220 kV transformer bank area, water provided by firefighting efforts will flow into a catch basin system installed around each transformer, which connects to a drainage pipe that flows into a concrete-lined detention basin measuring approximately 100 feet long, 50 feet wide, and 20 feet deep.

Primary access to the proposed Mesa Substation will be provided from Potrero Grande Drive via a new asphalt and/or concrete access driveway. Secondary access will be provided via a new access driveway off of East Markland Drive. The entrance at Potrero Grande Drive will be approximately 150 feet wide, and the entrance at East Markland Drive will be approximately 25 feet wide. Gates will be installed at both driveway entrances (Figure 2: *Proposed Substation Layout*).

Substation Grading and Drainage

Prior to construction, the Mesa Substation site will be cleared and graded to prepare the site for construction. Approximately 83.3 acres of the site will be graded. Approximately 20 acres of on-site vegetation will be removed during the clearing, grubbing, and grading for the

construction of the proposed Mesa Substation, including trees along the frontage and within the fence line of the existing Mesa Substation site. Mowers, excavators, front-end loaders, and/or D-9 bulldozers will be utilized to conduct the clearing and vegetation removal activities. The existing Mesa Substation property will be over-excavated, the on-site soil will be re-compacted to prepare the area for site development, and grading will ensue. Site grading will be accomplished primarily with bulldozers and backhoes, which will condition, cut and fill, and blend the native soil and imported material to the desired pad elevations. Construction of Mesa Substation will require 580,000 cubic yards (CY) of fill and 595,000 CY of cut.

SCE will prepare and implement a drainage plan to comply with the requirements of the jurisdictional agency, as well as to minimize surface water and erosion impacts. Existing drainage structures, facilities, and devices may need to be modified, removed, replaced, and/or relocated to meet post-development hydrology conditions. The substation pad area will be finish-graded from a high point elevation at the east end of the pad to the perimeter at a slope of approximately 1 percent. Drainage inlets and pipes will be constructed to collect and divert storm water runoff. The surrounding area will be re-graded, and the low points will be filled to provide positive surface drainage to the southwest. Currently, the property generally drains by sheet flow to ephemeral drainages at the southwest corner of the site. These ephemeral drainages connect to storm drains that connect to the Rio Hondo Channel, which flows into the Los Angeles River. A detention pond will be constructed in the southwest corner of the new substation site, and other site and source control best management practices (BMPs) will be included in the design to help mitigate surface runoff. Drainage systems will be constructed along the perimeter of the substation to direct interior surface runoff to the detention pond.

Transmission Lines Immediately Adjacent to Mesa Substation

Construction along the transmission lines will occur immediately adjacent to Mesa substation, primarily within areas characterized by ruderal vegetation (i.e., non-native grasses and mustard); however, coastal California Gnatcatcher has been observed near these Project elements south of the existing Mesa Substation. Vegetation around the transmission lines is expected to be removed prior to the work described in the following subsections.

500/220 kV Transmission Lines

The Project will remove an existing overhead portion of the Mira Loma-Vincent 500 kV Transmission Line and up to four LSTs immediately adjacent to Mesa Substation (Figure 3: *Project Overview (Transmission)*). Then the existing overhead, single-circuit Mira Loma-Vincent 500 kV Transmission Line will be looped into the new 500 kV switchrack, and the existing overhead transmission line alignment to Mesa Substation will be realigned with up to three new LSTs.

The Project will include removal of portions of the existing overhead 220 kV transmission lines, including up to 35 existing single- and double-circuit LSTs and approximately four TSPs immediately adjacent to Mesa Substation (Figure 2: *Proposed Substation Layout*). Following, the existing overhead Goodrich-Laguna Bell and Laguna Bell-Rio Hondo 220 kV transmission

lines will be looped into the new 220 kV switchrack by constructing new overhead getaways—supported by new double-circuit LST—from the existing transmission line alignment to Mesa Substation. In addition, eight existing overhead 220 kV transmission lines will be relocated to the new 220 kV switchrack by constructing new overhead getaways, which will be supported by approximately 25 new double-circuit LSTs and approximately six new single- or double-circuit TSPs. The one existing 220 kV LST will be replaced with a new 220 kV LST to increase the capacity rating of the existing Goodrich-Laguna Bell and Mesa-Redondo 220 kV transmission lines.

66 kV Subtransmission Lines

The Project will relocate 16 overhead 66 kV subtransmission circuits into the new 66 kV switchrack with new underground getaways (Figure 4: *Project Overview (Subtransmission)*). Relocating the existing 66 kV lines to Mesa Substation will involve the following:

- removal of existing overhead structures,
- installation of new underground line segments in new duct banks and vault structures, and
- the installation of new overhead line segments supported by single- and double-circuit TSPs and lightweight steel poles.

16 kV Distribution Lines

The Project will relocate five existing underground 16 kV distribution lines into the new 16 kV switchracks with new underground getaways (Figure 5: *Project Overview (Distribution)*). Within the proposed Mesa Substation, five initial 16 kV distribution circuits will be placed in an underground conduit system. At ultimate build-out, the proposed substation could accommodate up to twelve 16 kV distribution circuits. Additional electrical distribution circuits will be constructed from the proposed substation to areas of demand on an as-needed basis.

Access Roads and/or Spur Roads

The existing access roads occur immediately south of Mesa Substation, primarily within areas characterized by ruderal vegetation (i.e., non-native grasses and mustard); however, coastal California Gnatcatcher has been observed near this Project element. These roads are expected to be removed during initial site grading and replaced or modified at the end of construction.

Where required, a network of existing access roads could be improved and new roads will be constructed to current SCE road specifications to support the construction of the Project. Approximately 5.6 miles of existing dirt access roads on SCE property and existing ROWs will be used to access the Project work areas. Typical construction activities associated with rehabilitation of existing unpaved access roads include vegetation clearing, blade-grading, grubbing, mowing, and re-compacting to remove potholes, ruts, and other surface irregularities to provide a surface that is capable of supporting heavy construction equipment. Existing

unpaved roads may also require additional upgrades, such as protection (e.g., soil cover and steel plates) for existing underground utilities.

Helicopter Access

Helicopters will be used to support construction activities. Specifically, SCE currently anticipates helicopters will be utilized during conductor-stringing activities for the 500 kV and 220 kV transmission lines. SCE will consider the Institute of Electrical and Electronics Engineers Standards 524-2003, Guide to the Installation of Overhead Transmission Line Conductors, for the construction of the Project. Helicopters will be based at an existing aviation facility and will fly to the Project sites from that location. For the Project, helicopters may use the potential staging yard locations as needed and will most likely be based out of the El Monte and Chino airports, where refueling will occur.

Helicopter operations and support areas typically include helicopter staging and material yards, storage and maintenance sites, and ground locations in close proximity to conductor pulling, tensioning, and splice sites, and/or within previously disturbed areas near construction sites. In addition, helicopters must be able to land within SCE ROWs, which could include landing on access or spur roads. At night or during off-days, helicopters and their associated support vehicles and equipment will be based at a local airport for safety and security concerns.

Telecommunications Route

There is no vegetation clearing associated with the telecommunications route. A majority of the telecommunications route will occur along roadways and/or sidewalks on existing poles; however, there is native vegetation where the telecommunications route crosses the Montebello Hills and Whittier Narrows Natural Area. Portions of these areas are also classified as critical habitat for coastal California Gnatcatcher (Figure 6: *Coastal California Gnatcatcher Habitat and Designated Critical Habitat*). Generally, work within coastal California Gnatcatcher critical habitat consists of a worker walking between poles with a rope that will be used to pull the cable. Pull/tension locations along the telecommunications route are located in developed areas, outside of habitat for coastal California Gnatcatcher. In the event that a pole cannot be reached by a truck from an existing paved road, the worker will climb the pole to attach the new cable to the pole. As such, there will be no impacts to vegetation in coastal California Gnatcatcher critical habitat. Further, work will occur during the non-breeding season in order to avoid impacts to least Bell's Vireo. The following work description applies only to activities within native vegetation.

Telecommunications

Telecommunications infrastructure, which includes direct current power, LightWave, data, and channel equipment, will be added to existing overhead and underground structures. New impacts will occur at the end of the route where the telecommunications infrastructure is expected to be connected and spliced to the existing telecommunications route on LSTs. The new impacts are not within coastal California Gnatcatcher habitat, but are located within

disturbed areas around the LSTs where cable will be placed underground; however, the cable may connect overhead, thereby eliminating any ground disturbance. The telecommunications line will be installed on existing wood poles, lightweight steel poles, and LSTs. These structures will support 0.5-inch-diameter fiber optic cable. The lowest cable will be 20 to 30 feet above ground. The average span length between overhead structures will be 150 to 200 feet.

Staging Areas

Staging areas occur in ROWs adjacent to Mesa Substation and within areas characterized by ruderal vegetation that are not habitat for coastal California Gnatcatcher. Vegetation around the staging areas is expected to be removed prior to the start of construction.

Staging Areas Description

Construction of the Project will require the establishment of temporary staging yards (Figure 7: *Conductor Installation and Removal Work Areas*). Two types of staging yards will be used during construction—substation construction staging yards and transmission, subtransmission, distribution, and/or telecommunications construction staging yards. Staging yards will be used as a reporting location for workers, vehicle and equipment parking, and material storage. The yards may have construction trailers for supervisory and clerical personnel to serve as office and meeting locations. Staging yards may be lit for security purposes. Normal maintenance and refueling of construction equipment will also be conducted at these yards. SCE anticipates using one or more of the possible locations. Typically, the preferred acreage for each yard will be 5 to 25 acres in size, depending on land availability and intended use. Preparation of the staging yards will include temporary perimeter fencing and—depending on existing ground conditions at the site—clearing, grubbing, and/or minor grading may be required to provide a plane and dense surface for the application of gravel or crushed rock in some locations. Land disturbed at the staging yards will either be returned to pre-construction, weedy conditions or left without revegetating.

Materials commonly stored at substation construction staging yards will include, but will not be limited to:

- electrical equipment (e.g., circuit breakers, disconnect switches, lightning arresters, transformers, and vacuum switches)
- steel beams
- rebar
- foundation cages
- conduit
- insulators
- conductor and cable reels
- pull boxes
- line hardware

Materials and equipment commonly stored at the transmission, subtransmission, distribution, and/or telecommunications construction staging yards will include, but will not be limited to:

- construction trailers
- construction equipment
- portable sanitation facilities
- steel bundles
- steel/wood poles
- conductor reels
- overhead ground wire or overhead optical ground wire reels
- hardware
- insulators
- cross arms
- signage
- consumables (e.g., fuel and filler compound)
- waste materials for salvaging, recycling, or disposal
- BMP materials (e.g., straw wattles, gravel, and silt fences)

3.2 Minimization and Monitoring Measures

The following subsections describe the minimization and monitoring measures proposed by SCE to avoid and minimize the potential adverse effects to biological resources resulting from construction of the Project. The following general measures and measures developed for coastal California Gnatcatcher will be implemented during construction and are intended to avoid or minimize take.

General Measure

General Measure-01: **Pre-construction Surveys**. At least 60 days prior to the initiation of ground-disturbing activities, SCE will designate a field contact representative(s) who will be responsible for overseeing compliance with the measures outlined in the USFWS's biological opinion for the Project.

Mitigation Measures

MM-01: Revegetation Plan. To the extent feasible, SCE will minimize impacts and permanent loss to riparian habitat, native trees, and other vegetation that is regulated by federal, state, or local agencies, and/or that provides suitable habitat for special-status species. Impacts will be minimized at construction sites by flagging native vegetation to be avoided. If SCE is unable to avoid impacts to protected vegetation, a Habitat Compensation and Revegetation Plan (HCRP) will be prepared in coordination with the appropriate agencies for areas of native habitat that are temporarily and/or permanently impacted during construction. The HCRP will describe, at a minimum, which vegetation restoration method (e.g., natural revegetation, planting, or reseeding with native seed stock in compliance with the Project's Storm Water Pollution

Prevention Plan) will be implemented in the Project area. The HCRP will also include the species or habitats that could be impacted, the replacement or revegetation ratios (as appropriate), and the revegetation methods and techniques

MM-02: Biological Monitoring. To the extent feasible, biological monitors will monitor construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure that such resources are avoided.

MM-03: Coastal California Gnatcatcher Protection. A USFWS-approved biologist will conduct pre-construction surveys for coastal California Gnatcatcher no more than seven days prior to the start of ground-disturbing activities, if this work will commence between March 1 and August 30. Surveys for coastal California Gnatcatcher will be conducted in suitable nesting habitat within 100 feet of the Project area. Construction activities in occupied coastal California Gnatcatcher habitat will be monitored by a full-time USFWS-approved avian biologist. If a breeding territory or a nest with eggs or chicks are found, an exclusion buffer will be established around the nest. A standard buffer will be established for Project activities until an USFWS-approved avian biologist can determine a reduced buffer distance, based on proposed construction activities, or whether the young have left the nest. Temporary and permanent impacts to coastal California Gnatcatcher and their habitat will be mitigated as required by the USFWS.

MM-04: Nesting Birds. SCE will conduct pre-construction clearance surveys no more than seven days prior to construction to determine the location of nesting birds and territories during the nesting bird season. An avian biologist will establish a buffer area around active nests and will monitor the effects of construction activities to prevent failure of the active nest. The buffer will be established based on construction activities, potential noise disturbance levels, and the behavior of the species. Construction activities that have the potential to affect active nests will be monitored until the adjacent construction activities are complete or until the nest is no longer active.

Coastal California Gnatcatcher Mitigation Measures

MM-CAGN-01: Pre-construction Sweeps. In addition to conducting protocol-level surveys for coastal California Gnatcatcher (in accordance with MM-03) and nesting bird surveys (in accordance with MM-04), SCE will conduct pre-construction clearance surveys for coastal California Gnatcatcher within seven days prior to initiation of ground-disturbing activities during the breeding season (February 1 and August 30). The surveys are intended to detect coastal California Gnatcatcher that may take residence after the protocol-level surveys have been completed and/or where habitat is not previously determined to be occupied by coastal California Gnatcatcher. Surveys will be conducted by an Avian Biologist approved by SCE and USFWS. If nesting is behavior is observed, a California Gnatcatcher Specialist will monitor the species and install a buffer around any active nests, as needed.

MM-CAGN-02: Vegetation Removal. SCE will monitor vegetation clearing in coastal California Gnatcatcher habitat. Monitoring will be conducted by a biological monitor, which is a defined

as a wildlife biologist who has been approved by SCE to conduct surveys and monitoring for wildlife species. Vegetation removal will occur only after the California Gnatcatcher Specialist has confirmed that there are no active nests, the fledglings are no longer being fed by their parents, and/or the species has moved out of the work areas.

MM-CAGN-03: Coastal California Gnatcatcher Protection (Construction). A biological monitor will be present to ensure compliance with nest buffers during construction. Construction can occur within the buffers after the California Gnatcatcher Specialist confirms there are no active nests and/or the fledglings are no longer being fed by their parents. Construction monitoring for coastal California Gnatcatcher may be suspended if the California Gnatcatcher Specialist has determined that the species and their territories no longer overlap the Project.

MM-CAGN-04: Compensatory Mitigation. Permanent and temporary impacts to occupied coastal California Gnatcatcher breeding habitat will be mitigated at an off-site location, as agreed upon by the USFWS.

Additional Protection for Special-Status Wildlife Species

In addition to the APMs described previously, SCE will implement the following additional practices to minimize impacts to special-status species:

- **Worker Environmental Awareness Program Training:** Prior to construction, a qualified biologist or other qualified resource specialist will develop an environmental training for all Project personnel. The training will cover all pertinent Project APMs, permit conditions, and any other required environmental compliance measures. In addition, the environmental training will familiarize all Project personnel with special-status species that may occur within the construction areas. All Project personnel will attend the training prior to starting work on the Project. Upon completion of the training, each attendee will sign a form stating that he/she participated in the training and understood the material presented.

3.3 Monitoring and Reporting Plan

To mitigate impacts to species addressed in this BA, SCE will conduct biological monitoring of construction activities in the Project action area, including Mesa Substation; associated transmission, subtransmission, distribution, and telecommunications lines; and any area subject to Project disturbance. In addition to performing the duties detailed in Section 3.2 Minimization and Monitoring Measures, biological monitors will look for wildlife species addressed by this BA that may be located within or immediately adjacent to the construction areas. If coastal California Gnatcatcher is found, the biological monitor will stop work if necessary to prevent imminent harm to the animals and will report the occurrence, at minimum, to the SCE Biologist, Biology Project Manager, and California Gnatcatcher Specialist, who is an USFWS-approved biologist. The SCE Biologist, the Lead Biologist, and California Gnatcatcher Specialist will be responsible for implementing the appropriate minimization and monitoring measures. Monitoring notes and observations will be recorded daily.

During the construction of the Project, an annual report will be prepared, describing monitoring efforts and summarizing observations and actions taken. The SCE Biologist will coordinate with the contracted Biology Project Manager and the California Gnatcatcher Specialist to provide an annual written report to the USFWS detailing completed and ongoing construction-related compliance activities; any non-compliance issues pertaining to the coastal California Gnatcatcher; and any incidental observations of healthy, injured, or dead individuals of this species. SCE will notify the USFWS if any additional species listed under the ESA are observed during construction of the Project. SCE will prepare and provide the annual report by December 31 of each year of construction for the Project. The annual report will document compliance with the minimization and monitoring measures. Specifically, the annual report will describe the activities that were not in compliance with the minimization and monitoring measures and the corrective measures that were implemented to restore compliance.

3.4 Habitat Mitigation and Conservation

Coastal California Gnatcatcher

Coastal California Gnatcatcher at the Project site are nesting south of the existing Mesa Substation, primarily within a restored slope with coastal sage scrub, also referred to as "occupied breeding habitat" (Figure 8: *Coastal California Gnatcatcher Nest Locations*). Areas adjacent to the coastal sage scrub are within the territories for breeding coastal California Gnatcatcher but are being primarily used for foraging; however, because of the limited amount of coastal sage scrub on and adjacent to the Project site, historic breeding has occurred in areas that are considered atypical habitat and will be referred to as "occupied unsuitable habitat."

Although permanent impacts to the coastal sage scrub are minimal, there will be a temporal loss of occupied breeding habitat in coastal sage scrub for an excess of five years, which could affect the viability of the breeding individuals. Furthermore, a majority of the coastal sage scrub on areas adjacent to the Project, which includes the restricted use area and the OII Landfill, is expected to be converted into a shopping center within five years.

SCE will consider both the permanent and temporary impacts to coastal sage scrub as a permanent effect and will mitigate off site at a two-to-one ratio. Occupied breeding habitat that is to be permanently and temporarily impacted will be mitigated off site by purchasing credits of coastal sage scrub at Soquel Canyon, an approved mitigation bank held and managed by Land Veritas, or a comparable option. Once construction is complete, the occupied breeding habitat will be revegetated with native vegetation but not restored to coastal sage scrub, given that the Monterey Park Market Place development is expected to result in the long-term loss of viability of the species on site. The adjacent occupied unsuitable habitat will be revegetated to conditions similar to the current vegetation at a one-to-one ratio upon completion of construction. As stipulated under MM-01, SCE will prepare an HRCP to guide the implementation of revegetation for temporary impacts to occupied unsuitable habitat. Permanent impacts within occupied unsuitable habitat will not be mitigated given that this is not habitat for coastal California Gnatcatcher and, as further described in Section 4.1 Coastal

California Gnatcatcher, surveys from 2011-2015 have indicated that this species has not nested successfully in the atypical habitat where permanent impacts would occur.

Finally, there will be no impacts to coastal California Gnatcatcher habitat within critical habitat. However, if any temporary impacts were to occur unexpectedly to coastal California Gnatcatcher habitat along the telecommunications routes, then the HCRP will include guidelines and specifications to revegetate such habitat.

4.0 SPECIES AND HABITAT DESCRIPTION

4.1 Coastal California Gnatcatcher

Background Information

Coastal California Gnatcatcher is a federally threatened species and a state species of special concern. This species is a non-migratory songbird and is found west of the Peninsular and Transverse Ranges in coastal southern California. This species is primarily found at elevations below 800 feet along the coast and up to 1,600 feet inland. The largest populations of this species occur in San Diego, Orange, and Riverside counties, with smaller populations in Los Angeles County, southwestern San Bernardino County, and southern Ventura County (Atwood and Bontrager 2001). As of 1990, coastal California Gnatcatcher populations in California were estimated at 2,000 or fewer pairs (USFWS 2010). The coastal California Gnatcatcher occurs in the coastal sage scrub communities of southern California, especially in locations dominated by California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Other shrubs in coastal sage scrub vegetation communities occupied by coastal California Gnatcatcher include California bush sunflower (*Encelia californica*), brittlebush (*Encelia farinosa*), black sage (*Salvia mellifera*), white sage (*Salvia apiana*), and deerweed (*Acmispon glaber*).

The breeding season for coastal California Gnatcatcher extends from approximately February 1 through August 31, with peak nesting activity occurring from mid-March through mid-May. The incubation period takes 14 days and the young fledge at eight to 13 days. The young are dependent on their parents for up to three or four weeks; however, fledglings may continue to associate with their parents for several months (USFWS 1997). Foraging by coastal California Gnatcatcher primarily consists of gleaning sessile prey from foliage while quickly moving through branches of shrubs. Larger prey items are beaten against a branch before being swallowed whole or fed to juveniles (Atwood and Bontrager 2001).

Presence in the Project Action Area

Focused coastal California Gnatcatcher surveys were conducted for the TRTP in 2011 (ICF International [ICF] 2011) within portions of the Project impact area, and then again for the Mesa 500 kV Substation Project in 2015. In addition, the species was monitored during construction of the TRTP. As a result, there are five years of monitoring data for the Project, which includes nesting locations from 2011 through 2015 (Figure 8: *Coastal California*

Gnatcatcher Nest Locations). Protocol-level coastal California Gnatcatcher surveys were conducted by Rocks Biological Consulting (RBC) on April 9 through May 15, 2015. Surveys were conducted in potential coastal California Gnatcatcher habitat identified by RBC.

Based on monitoring for the TRTP, this species was observed foraging and nesting immediately south of Mesa Substation from 2010 through 2014. Although most of the historic nests were within a restored area of coastal sage scrub south of Mesa Substation, several historic nests were within atypical habitat, which included isolated patches (two to four plants) of mulefat (*Baccharis salicifolius*) surrounded by ruderal vegetation (e.g., non-native mustards [*Brassica nigra*, *Hirschfeldia incana*, and *Raphanus sativus*], grasses [*Avena* spp. and *Bromus* spp.]) and ornamental/non-native shrubs and trees (e.g., bougainvillea [*Bougainvillea spectabilis*] and Peruvian pepper-tree [*Schinus molle*]). Coastal California Gnatcatcher also was observed historically foraging in the Montebello Hills and in the Rio Hondo and San Gabriel River corridors.

RBC surveyed the area immediately south of the existing Mesa Substation within areas previously determined by the TRTP to be both occupied suitable habitat (i.e., having breeding pairs in coastal sage scrub with the primary habitat components) and occupied unsuitable habitat (i.e., nesting in native vegetation within ruderal areas). The survey area also included the restricted use area within the SCE ROW, the telecommunications route where it crosses the Montebello Hills (including along the edge of the landfill and Lincoln Avenue), and the Rio Hondo and San Gabriel River corridors (Figure 6: *Coastal California Gnatcatcher Habitat and Designated Critical Habitat*).

A total of six pairs of breeding coastal California Gnatcatcher were observed during RBC's 2015 protocol surveys. Two nesting pairs and their nests were identified adjacent to the existing Mesa Substation in occupied breeding habitat. One of the nests was within ground-disturbing impact areas for the Project; the other nest was located outside the Project's ground-disturbing impact area on the adjacent OII Landfill parcel (Figure 8: *Coastal California Gnatcatcher Nest Locations*). The remaining four breeding pairs were observed along the telecommunications route in the Montebello Hills. Both pairs adjacent to the existing Mesa Substation fledged three offspring during the survey period. In the Montebello Hills area north of Lincoln Avenue, four pairs of coastal California Gnatcatcher exhibited nesting behavior but, due to access restrictions, the precise location of nests was not confirmed. Of those, three were observed with fledglings. No individuals exhibiting nesting activity were observed in the Rio Hondo or San Gabriel River corridors (Attachment A: *Coastal California Gnatcatcher Survey Report*).

Designated Critical Habitat

Critical habitat for coastal California Gnatcatcher occurs within the Project area along the telecommunications route, in the Montebello Hills, and in the Rio Hondo and San Gabriel River corridors (Figure 6: *Coastal California Gnatcatcher Habitat and Designated Critical Habitat*). Approximately 3.80 acres of the Project area are designated as coastal California Gnatcatcher critical habitat. As discussed in Section 3.1 Project Components and Construction Description, construction work along the telecommunications route consists of workers manually stringing

cable, which will occur outside of the nesting season and adjacent to existing paved roads. Thus, this work will not result in ground-disturbing activities.

5.0 BASELINE ENVIRONMENTAL CONDITIONS

5.1 General Site Conditions

The Project consists of urbanized development and natural areas, including several nurseries located within SCE ROWs. The Project area is located within the Los Angeles River Hydrological Unit. Elevation ranges from 130 feet to 750 feet above mean sea level, with the lower elevations in the southwest portion of the Project, and the higher elevations at the northeast portion. The climate is subtropical and Mediterranean. The nearest climatological station (in the City of Montebello) recorded an average annual rainfall of 15.3 inches between 1981 and 2010. Fourteen vegetation communities occur in the Project area (Figure 9: *Vegetation Communities*); however, coastal California Gnatcatcher has been observed in only five of these plant communities. Given that no impacts to vegetation will occur along the telecommunications route, it will not be discussed further in this section. The following vegetation communities are located within permanent and temporary impacts adjacent to the existing substation where the presence of coastal California Gnatcatcher has been documented:

- coastal sage scrub
- mulefat scrub
- ruderal (atypical habitat)
- ephemeral drainages

Coastal California Gnatcatcher

Coastal sage scrub is the typical habitat for coastal California Gnatcatcher and consists of low, mostly soft-woody shrubs with a sparse herbaceous layer. Stands may be dominated by California sagebrush or by California buckwheat. Coastal California Gnatcatcher is also known to occupy other vegetation communities. The Primary Constituent Elements (PCEs) for critical habitat, pursuant to the Final Rule (USFWS 2007), are defined as follows:

- Dynamic and successional sage scrub habitats (PCE 1): Venturan coastal sage scrub, Diegan coastal sage scrub, Riversidean sage scrub, maritime succulent scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal, and foraging.

- Non-sage scrub habitats (e.g., chaparral, grassland, and riparian areas) in proximity to sage scrub habitats, as described for PCE 1, which provide space for dispersal, foraging, and nesting.

Coastal sage scrub occurs south of the existing Mesa Substation, along the southern boundary of the Project area and within a restricted use area, and extends off-site and further to the south along a restored cut and fill slope. The restored slope is dominated by California sagebrush and California buckwheat. In addition, ephemeral drainages in this area support scattered patches of low-quality mulefat scrub, which are intermixed with stands of castor bean (*Ricinis communis*), Peruvian pepper-tree, and an assemblage of other non-native and ornamental species.

The majority of the vegetation south of the Mesa Substation site is ruderal and highly disturbed, due to regular vegetation removal associated with substation and transmission corridor activities. In addition, the southern portion of the site was formerly occupied by a nursery, and supports an assembly of naturalized ornamental species. Much of the ground cover consists of mustards, Russian thistle (*Salsola tragus*), and non-native grasses. A few native and non-native shrubs are scattered in the mustard areas, but the majority of shrubs—where present—are within the ephemeral drainages.

As discussed in Section 4.1 Coastal California Gnatcatcher, protocol-level surveys conducted in 2015 identified two coastal California Gnatcatcher breeding pairs south of the existing Mesa Substation site. The nest of one breeding pair was observed within coastal sage scrub on the off-site restored slope (Figure 8: *Coastal California Gnatcatcher Nest Locations*). A second pair was observed nesting on site within coastal sage scrub adjacent to a dirt access road. Previous surveys conducted for the TRTP identified nests in coastal sage scrub, mulefat scrub, and ruderal vegetation that were primarily concentrated in the southernmost area of the Mesa Substation site. Occupied breeding habitat for coastal California Gnatcatcher was mapped based on these nest locations, the coastal California Gnatcatcher activity observed during the 2015 protocol-level surveys, and previous coordination with USFWS on TRTP regarding the definition of occupied habitat at the Mesa site (Figure 8: *Coastal California Gnatcatcher Nest Locations*).

6.0 EFFECTS OF THE PROPOSED ACTION

This section addresses the potential direct, indirect, and cumulative effects to the coastal California Gnatcatcher resulting from the construction of the Project. Impacts from construction will be minimized by implementing measures described in Section 3.2 Minimization and Monitoring Measures, and are considered in this analysis.

The Project will result in permanent and temporary impacts to occupied breeding habitat for coastal California Gnatcatcher (Figure 10: *Anticipated Impacts to Coastal California Gnatcatcher Habitat*). No direct impacts will occur to occupied breeding habitat within the restricted use area or on adjacent parcels, outside the Project area. There will be impacts to occupied unsuitable habitat that historically had nests but was used only for foraging in 2015. No direct take of individual birds is anticipated. No direct impacts will occur along the telecommunications route within coastal California Gnatcatcher habitat.

A minimal amount of permanent impact will occur within occupied breeding habitat; most permanent impacts will be to occupied unsuitable habitat within ruderal vegetation immediately south of the existing Mesa Substation. Temporary impacts are also expected immediately south of the existing Mesa Substation within both occupied breeding habitat and occupied unsuitable habitat, in ruderal vegetation, an ephemeral drainage, mulefat scrub, and a small area of coastal sage scrub. Occupied breeding habitat in coastal sage scrub will be temporarily impacted for an excess of five years. Individual birds will be able to use coastal sage scrub located in the restricted use area and on parcels adjacent to the Project after vegetation is removed during the initial clearing phase.[1] However, as construction of the Monterey Park Market Place will eventually result in permanent impacts to on-site and adjacent off-site occupied breeding habitat, temporary Project impacts will be considered to have a permanent effect resulting in the long-term loss of viability of coastal California gnatcatcher in the Project area. As such, permanent and temporary impacts to occupied breeding habitat will be mitigated off-site at a two-to-one ratio, and impacted areas will be revegetated with native vegetation but not restored to coastal sage scrub. Occupied unsuitable habitat will be revegetated upon construction completion to like conditions.

6.1 Coastal California Gnatcatcher

Direct Effects to Occupied Breeding Habitat

Direct impacts are expected to affect a total of 1.00 acre of occupied breeding habitat for coastal California Gnatcatcher south of the existing Mesa Substation (Table 3: *Anticipated Impacts to Occupied Breeding Habitat of Coastal California Gnatcatcher*). Permanent and direct impacts to occupied breeding habitat for coastal California Gnatcatcher will occur within 0.02 acre of coastal sage scrub. In addition, there will be a temporal loss in excess of five years to 0.98 acre of occupied breeding habitat for coastal California Gnatcatcher. Within the areas affected, these impacts could affect up to two pairs of coastal California gnatcatcher. Shrubs and other vegetation used by coastal California Gnatcatcher will be removed in these areas, resulting in the loss of foraging and nesting habitat and/or the removal of some food sources. Impacts will be most significant during the nesting season, which is generally March through August. Permanent and temporary impacts to occupied breeding habitat will be mitigated off-site by purchasing credits for coastal sage scrub at a two-to-one ratio. As a result, off-site mitigation will result in a net increase in coastal California Gnatcatcher habitat. The details of the mitigation plan for this species will be coordinated with the USFWS and incorporated into the HCRP.

Direct Effects to Occupied Unsuitable Habitat

Impacts will also occur to occupied unsuitable habitat within the territories of coastal California Gnatcatcher where birds will forage. Birds appear to be using these low-quality areas because

[1] SCE assumes that construction of the adjacent Monterey Park Market Place will not remove the adjacent coastal sage scrub before the initial clearing phase of the Mesa 500 kV Substation Project.

of the limited availability of suitable coastal sage scrub habitat on and adjacent to the Project area. Shrubs and other vegetation used by coastal California Gnatcatcher in occupied unsuitable habitat will be removed in these areas, resulting in the temporary loss of foraging habitat and/or the removal of some food sources in excess of five years.

Table 3: Anticipated Impacts to Occupied Breeding Habitat of Coastal California Gnatcatcher

Location	Occupied Breeding Habitat in Project Area (acres)	Temporal Impacts to Occupied Breeding Habitat[2] (acres)	Permanent Impacts to Occupied Breeding Habitat (acres)	No Impacts to Occupied Breeding Habitat (Restricted Use Area) (acres)
Adjacent to existing Mesa Substation site	1.40	0.98	0.02	0.40
Total	**1.40**	**0.98**	**0.02**	**0.40**

Direct temporary impacts to coastal California Gnatcatcher may also include the disruption of nesting behavior due to a temporary increase in the presence of humans, dust, and noise from construction equipment and vehicles. Increased noise and vibration resulting from heavy equipment could also disrupt nesting behavior in the restricted use area and in habitat outside of the Project, but within the Project action area (e.g., the off-site coastal sage scrub slope immediately south of the Mesa Substation site), which could further reduce available habitat for this species.

SCE will reduce direct impacts to coastal California Gnatcatcher by implementing MM-03, MM-04, MM-CAGN-01, MM-CAGN-02, MM-CAGN-03, and MM-CAGN-04, which includes conducting protocol-level surveys prior to the start of construction. Further, direct impacts will be reduced by implementing no-work buffers, as appropriate, if nesting birds are found within the Project action area, clearing vegetation only after a USFWS-approved biologist has swept the area for individual birds, ensuring that a biological monitor is present, and limiting work in close proximity to active nests until after chicks have fledged and are no longer dependent on their parents.

Indirect Effects

No indirect effects on coastal California Gnatcatcher are anticipated as a result of the Project.

[2] Temporary impact acres include temporal impacts for an excess of five years. These temporal impacts will be considered as a permanent effect of the species given that adjacent development projects may affect the long-term viability of the species. A portion of SCE's temporal impact acreage located north and west of Greenwood Avenue is within areas analyzed by the Monterey Park Market Place Final Environmental Impact Report and was found to have permanent impacts; consequently, some of these areas will be permanently impacted by the Monterey Park Market Place after temporal impacts have happened for the SCE project.

Critical Habitat

Critical habitat for coastal California Gnatcatcher occurs within the Project action area, along the telecommunications route, in the Montebello Hills and in the Rio Hondo and San Gabriel River corridors (Figure 6: *Coastal California Gnatcatcher Habitat and Designated Critical Habitat*). As discussed in Section 3.1 Project Components and Construction Description, construction work along the telecommunications route consists of workers manually stringing cable, which will occur outside of the nesting season and adjacent to existing paved roads. Thus, this work will not result in ground-disturbing activities.

Temporary impacts to critical habitat for the coastal California Gnatcatcher may include the disruption of nesting behavior within the Project action area due to a temporary increase in the presence of humans, dust, and noise from construction equipment and vehicles. These temporary impacts occur at the edges of habitat along existing roads and a landfill where there are existing human presence, dust, and noise. Thus, temporary effects in critical habitat are not likely to be significantly greater than the existing human presence, dust, and noise. Further, human presence, dust, and noise associated with construction are minimal and limited in duration. SCE will reduce impacts further to critical habitat for coastal California Gnatcatcher by implementing MM-03, MM-04, MM-CAGN-01, and MM-CAGN-03, which includes conducting protocol-level surveys prior to the start of construction. Impacts will be reduced by implementing no-work buffers as appropriate if nesting birds are found within the Project area, ensuring that a biological monitor is present, and limiting work in close proximity to active nests until after chicks have fledged and are no longer dependent on their parents.

Determination of Effect

Based on a literature review, field investigations, the Project design, and the construction schedule, SCE has determined that the activities associated with the Project "may affect, and will likely adversely affect" coastal California Gnatcatcher. The Project is "not likely to adversely affect" designated critical habitat for coastal California Gnatcatcher because the temporary effects of human presence, dust, and noise occur are minimal, limited in duration, and at the habitat edges along roads and a landfill. As part of the Project, SCE will implement the minimization and monitoring measures described in Section 3.2 Minimization and Monitoring Measures, to avoid and/or minimize the potential for direct take of federally protected species.

6.2 Cumulative Effects

Cumulative effects include the effects of future actions that are reasonably certain to occur in the Project action area considered in this BA. Future federal actions that are unrelated to the Project are not considered here because they require separate consultation pursuant to Section 7 of the federal ESA.

Construction and grading associated with the Project will result in temporary impacts to approximately 0.98 acre of coastal California Gnatcatcher occupied breeding habitat and direct permanent impacts to approximately 0.02 acre. In addition, the Monterey Park Market Place

has the potential to permanently impact habitat for the coastal California Gnatcatcher adjacent to the Project site. The coastal sage scrub on the parcel immediately south of the Mesa Substation site is located within the Monterey Park Market Place's development plan. As such, there is a potential that coastal California Gnatcatcher will no longer occur on the Project site should the Monterey Park Market Place be developed prior to the Project. The Montebello Hills Master Planned Community, located approximately 0.3 mile to the southeast of Mesa Substation, will also permanently affect habitat for the coastal California Gnatcatcher, including a portion of critical habitat designated for this species. However, the Montebello Hills Master Planned Community will result in a net increase in coastal California Gnatcatcher habitat due to mitigation for that project in the form of an approximately 260.60-acre, on-site habitat reserve. As a result, the Montebello Hills Master Planned Community and the Project will not result in cumulative impacts to coastal California Gnatcatcher habitat. In addition, all projects will be subject to the same permitting requirements under the federal and California ESAs, which are intended to minimize and mitigate for impacts to species, both at the project level and in a regional context. As a result, cumulative impacts to coastal California Gnatcatcher habitat are expected to be minimal with the implementation of minimization and monitoring measures from the Project and other projects.

7.0 LITERATURE CITED

Atwood, J.L, and D.R. Bontrager. 2001. California Gnatcatcher (*Polioptila californica*). In Poole, A., and F. Gill (eds). The Birds of North America, No. 574. Philadelphia, Pennsylvania. The Birds of North America, Inc.

Atwood, J.L. and D.R. Bontrager. 1992. *Elevational Distribution of the California Gnatcatchers in the United States*. Journal of Field Ornithology 63 (2): 159-168.

Aviation Power Line Interaction Committee. 2006. *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006.* Online. http://www.aplic.org/uploads/files/2643/SuggestedPractices2006(LR-2).pdf. Accessed May 15, 2015.

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson. T.J. Rosatti, and D.H. Wilken. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition.* Berkeley, California: University of California Press.

CDFW. 2013. Natural Community Conservation Planning. Online. https://www.dfg.ca.gov/habcon/nccp/. Accessed July 23, 2014.

ICF. 2010. *Focused Survey Report for Coastal California Gnatcatcher, Segments 7 and 8*. October. Irvine, CA. Prepared for Southern California Edison, California.

ICF. 2011. *Focused Survey Report for Coastal California Gnatcatcher, Segments 7 and 8*. October. Irvine, CA. Prepared for Southern California Edison, California.

SCE. 2015. Mesa 500 kilovolt Substation Project Proponent's Environmental Assessment. Filed with the CPUC on March 13, 2015.

USFWS and National Marine Fisheries Service. 1998. Endangered Species Act Consultation Handbook Procedures for Conducting Section 7 Consultations and Conferences. Online. https://www.fws.gov/ENDANGERED/esa-library/pdf/esa_section7_handbook.pdf. Accessed May 15, 2015.

USFWS. 1997. *Coastal California Gnatcatcher (Polioptila californica californica) Presence/Absence Survey Guidelines*. Carlsbad, CA: USFWS. Unpublished report, dated July 28, 1997.

USFWS. 2007. *Endangered and Threatended Wildlife and Plants; Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (Polioptila californica californica.* Online. http://www.gpo.gov/fdsys/pkg/FR-2007-12-19/pdf/07-6003.pdf#page=1. Accessed May 5, 2015.

USFWS. 2010. *Coastal California Gnatcatcher (Polioptila californica californica) 5-year Review: Summary and Evaluation.*

USFWS. 2013. Conservation Plans and Agreements Database. Online. http://ecos.fws.gov/conserv_plans/public.jsp. Site visited July 2014.

Figure 1:
Project Overview and Action Area

Mesa 500 kV Substation Project

New telecommunications line from transmission tower M40-T3 to Mesa Substation

Mesa Substation and associated transmission, subtransmission, distribution, and telecommunications lines

New telecommunications line from transmission tower M38-T5 to Mesa Substation

Telecommunications line re-route between Mesa and Harding substations

- Mesa Substation Study Area
- Action Area
- Existing Substation
- Proposed Telecommunications

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

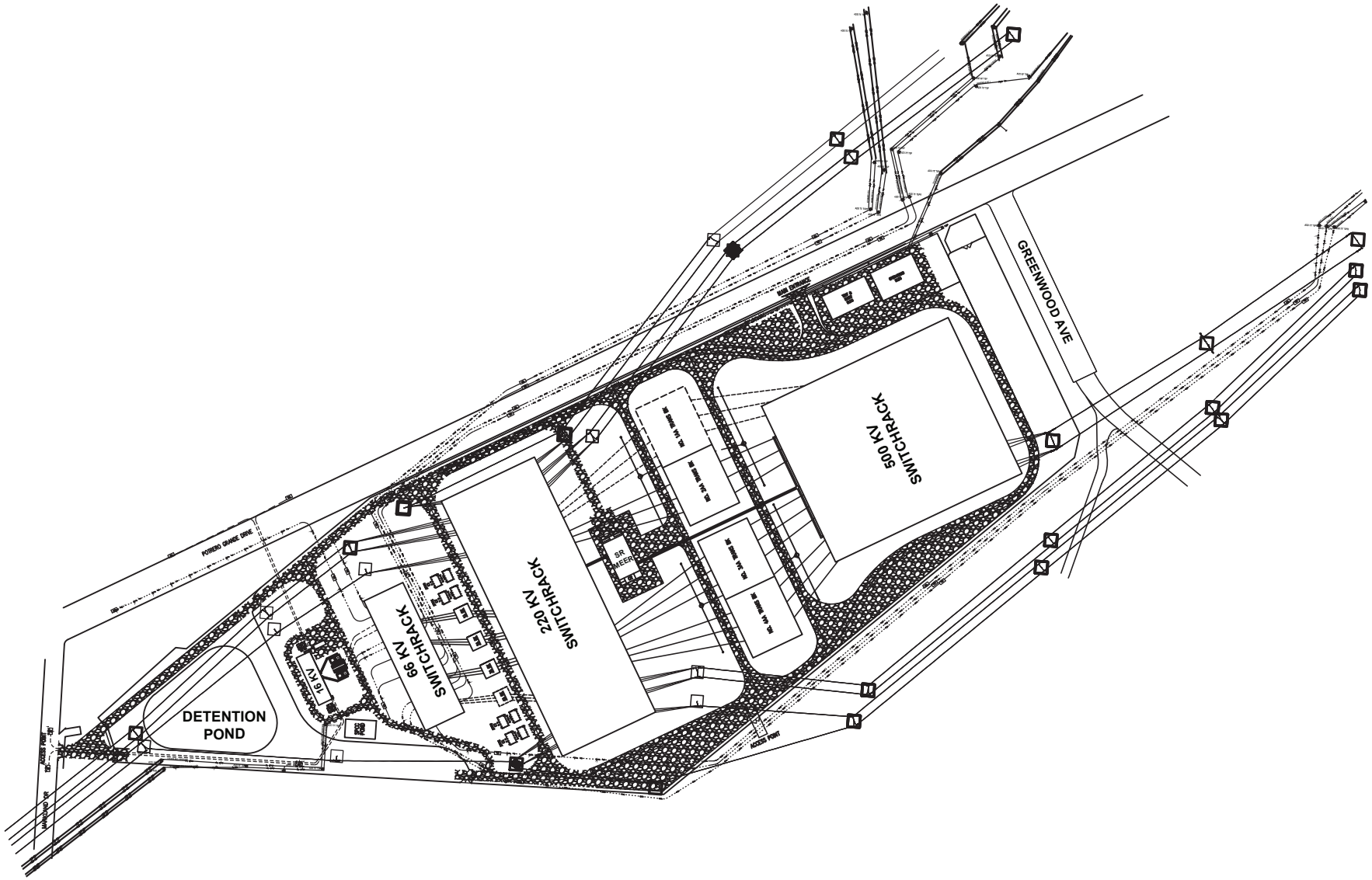
INSIGNIA ENVIRONMENTAL

N

1:24,000

0 0.25 0.5 Miles

Z:\Projects\SCE_MesaMXD\aTechnical_Reports\BA\Fig_1_Overview.mxd 6/12/2015

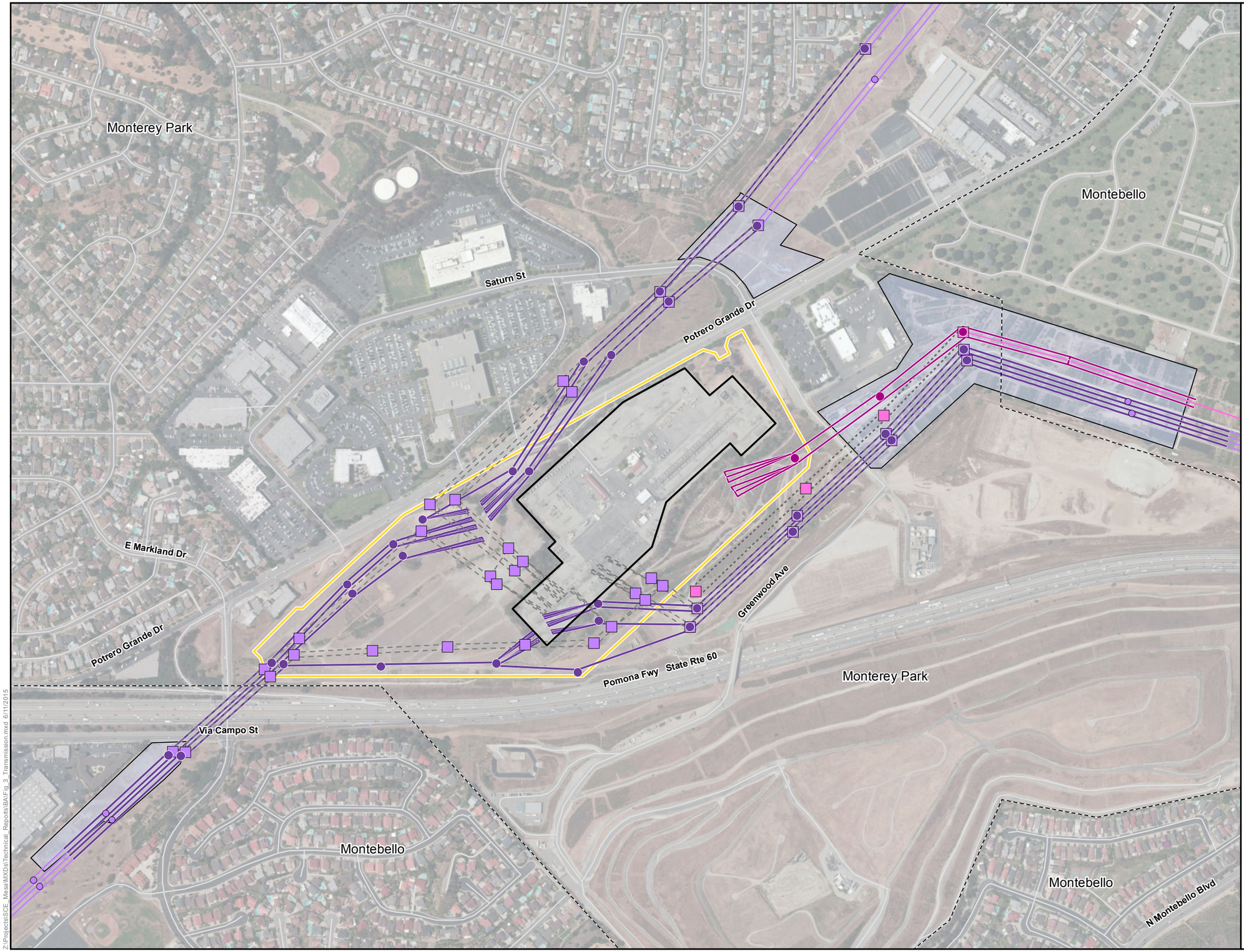


SOUTHERN CALIFORNIA EDISON®
An *EDISON INTERNATIONAL*® Company

Figure 2: Proposed Substation Layout

Figure 3:
Project Overview
(Transmission)

Mesa 500 kV Substation Project



- Proposed Substation Perimeter Wall
- Existing Substation
- Staging Yard
- City Boundary

500 kV Transmission

- Proposed 500 kV Structure
- Existing 500 kV Structure to be Removed
- Proposed 500 kV Line
- Existing 500 kV Line to be Removed
- Existing 500 kV Line to Remain

220 kV Transmission

- Proposed 220 kV Structure
- Existing 220 kV Structure to be Removed
- Existing 220 kV Structure to Remain
- Proposed 220 kV Line
- Existing 220 kV Line to be Removed
- Existing 220 kV Line to Remain

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:6,400

0 500 1,000 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BAF\fig_3_Transmission.mxd 6/11/2015

Figure 4:
Project Overview
(Subtransmission)

Mesa 500 kV Substation Project

- Proposed Substation Perimeter Wall
- Existing Substation
- Staging Yard
- City Boundary

Subtransmission Structures

- Existing Structure to Remain
- Proposed Structure
- Existing Structure to be Removed
- Proposed Vault

Subtransmission Lines

- Existing Overhead 66 kV Line to Remain
- Existing Overhead 66 kV Line to be Removed
- Existing Underground 66 kV Line to be Removed
- Proposed Overhead 66 kV Line
- Proposed Underground 66 kV Line

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,000
0 250 500 Feet

Z:\Projects\SCE_Mesa\MXD\sTechnical_Reports\BA\Fig.4_Subtrans.mxd 6/11/2015

Figure 5:
Project Overview
(Distribution)

Mesa 500 kV Substation Project

Proposed Substation Perimeter Wall
Existing Substation
Staging Yard
City Boundary

Distribution Structures

Existing Pole
Existing Vault (Manhole)
Proposed Pole
Proposed Vault

Distribution Lines

Existing 16 kV Underground Line to Remain
Proposed 16 kV Underground Line
Re-Route 16 kV Underground Line
Existing 16 kV Underground Line to be Removed

Note: Location of proposed facilities are approximate.
Exact locations to be determined after final design is completed.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

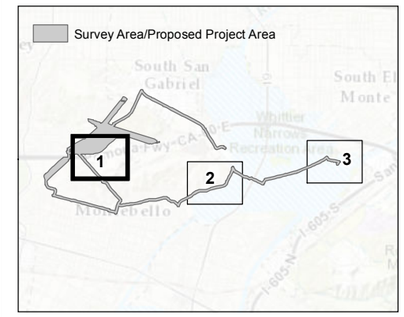
1:4,946
0 250 500 Feet

Z:\Projects\SCE_Mesa\MXD\Technical_Reports\BA\Fig_5_Distribution.mxd 6/11/2015

Figure 6:
Coastal California Gnatcatcher Designated Critical Habitat Map
Map 1 of 3

Mesa 500 kV Substation Project

- Survey Area/Project Area
- Action
- Proposed Substation Perimeter Wall
- Existing Substation
- City Boundary
- Coastal California Gnatcatcher Occupied Breeding Habitat
- Coastal California Gnatcatcher Habitat
- Coastal California Gnatcatcher Critical Habitat



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

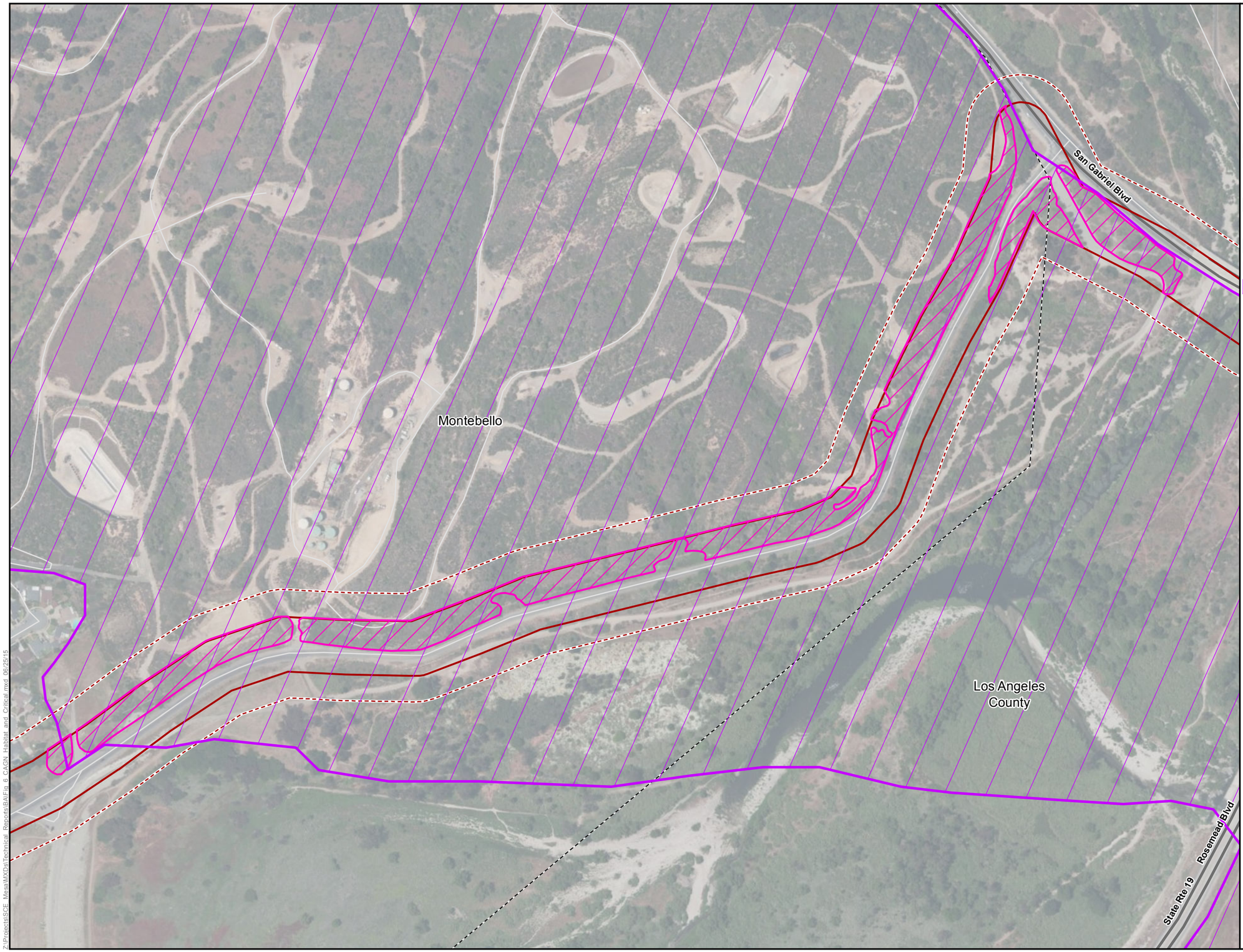
1:4,800
0 250 500 Feet

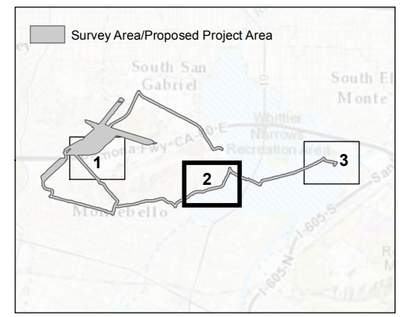
Z:\Projects\SCE_Mesa\MXD\s\Technical_Reports\BA\Fig_6_CAGN_Habitat_and_Critical.mxd 06/25/15

Figure 6:
Coastal California Gnatcatcher Designated Critical Habitat Map
Map 2 of 3

Mesa 500 kV Substation Project

- Survey Area/Project Area
- Action
- Proposed Substation Perimeter Wall
- Existing Substation
- City Boundary
- Coastal California Gnatcatcher Occupied Breeding Habitat
- Coastal California Gnatcatcher Habitat
- Coastal California Gnatcatcher Critical Habitat





SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

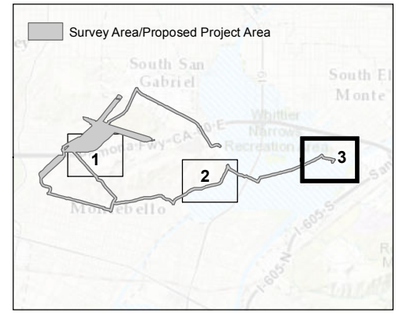
1:4,200
0 250 500 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical Reports\BA\Fig_6_CAGN_Habitat_and_Critical.mxd 09/25/15

Figure 6:
Coastal California Gnatcatcher Designated Critical Habitat Map
Map 3 of 3

Mesa 500 kV Substation Project

- Survey Area/Project Area
- Action
- Proposed Substation Perimeter Wall
- Existing Substation
- City Boundary
- Coastal California Gnatcatcher Occupied Breeding Habitat
- Coastal California Gnatcatcher Habitat
- Coastal California Gnatcatcher Critical Habitat



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

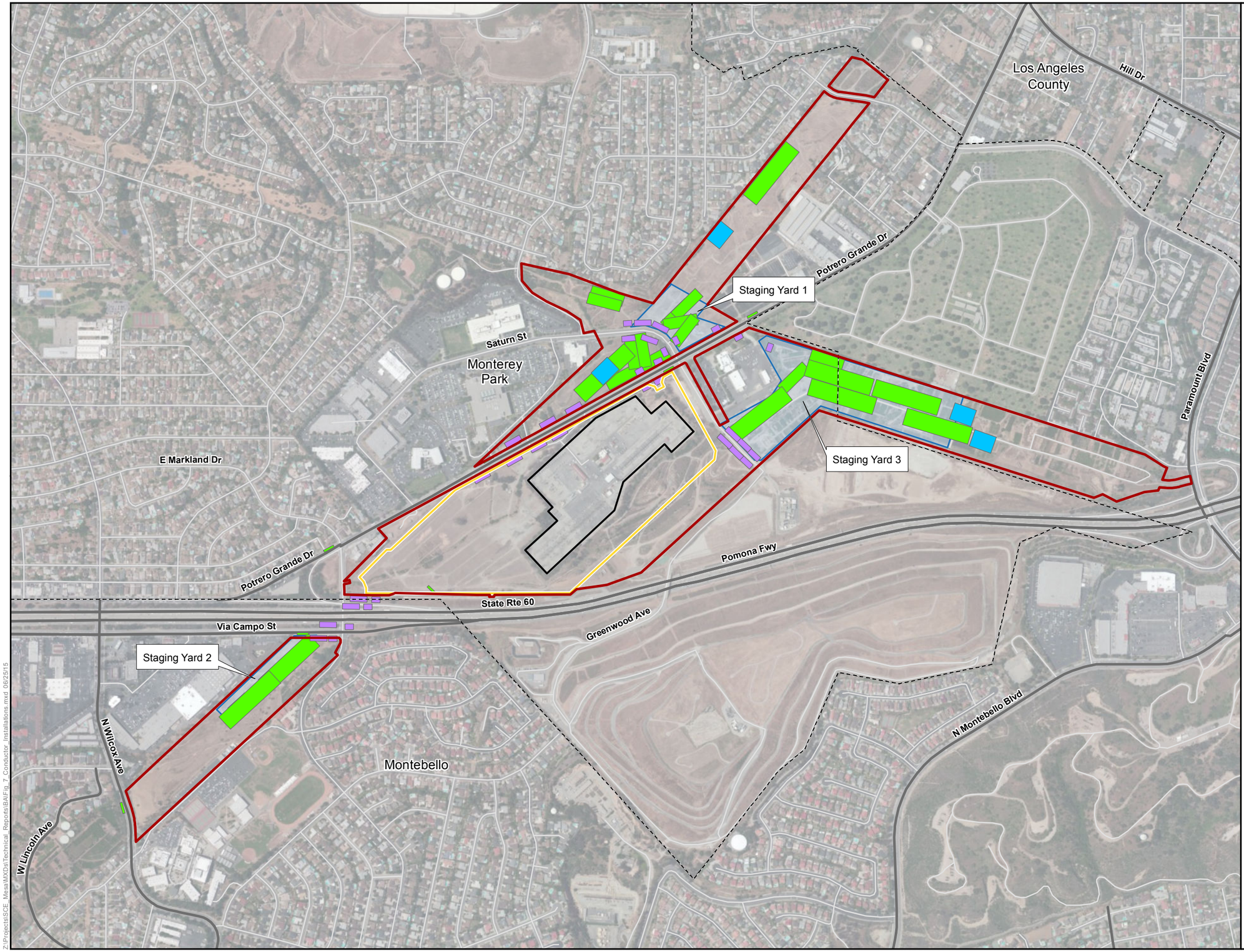
INSIGNIA ENVIRONMENTAL

1:4,200
0 250 500 Feet

Z:\Projects\SCE_Mesa\MXD\s\Technical_Reports\BA\Fig_6_CAGN_Habitat_and_Critical.mxd 06/25/15

Figure 7:
Conductor Installation and Removal Work Areas

Mesa 500 kV Substation Project



- Mesa Substation Study Area
- Proposed Substation Perimeter Wall
- Existing Substation
- City Boundary
- Splicing Setup Area
- Pulling and Tensioning Area
- Guard Structure Work Area
- Staging Yard

Note: In some locations, multiple work areas overlap with each other. These overlapping areas were removed from the values presented in to avoid double-counting.

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:10,000
0 500 1,000 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_7_Conductor_Installations.mxd 06/25/15

Figure 8:
Coastal California Gnatcatcher Nest Locations

Mesa 500 kV Substation Project

DEV
NNW
ED
MFS
RUD
CSS
CSS
Coastal Sage Scrub within Restricted Use Area (No Impacts)
Offsite Coastal Sage Scrub
Monterey Park
State Rte 60
Pomona Fwy
Pomona Fwy
Garfield Ave

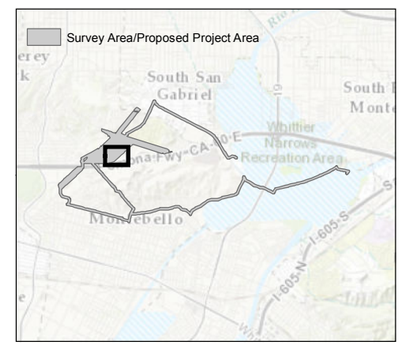
Survey Area/Project Area
Action Area
Restricted Use Area (No Impacts)
Existing Substation
Coastal California Gnatcatcher Occupied Breeding Habitat

Coastal California Gnatcatcher Nests

Successful
- 2011
- 2012
- 2013
- 2015

Unsuccessful
- 2013
- 2014

Vegetation Communities
- Coastal Sage Scrub (CSS) – Impacted
- Coastal Sage Scrub (CSS) – Restricted Use Area (No Impact)
- Disturbed/Developed (DEV)
- Ephemeral Drainage (ED)
- Mulefat Scrub (MFS)
- Non-Native Woodland (NNW)
- Ruderal (RUD)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:1,800
0 100 200 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BAF\fig_8_CAGN_Nests.mxd 06/25/15

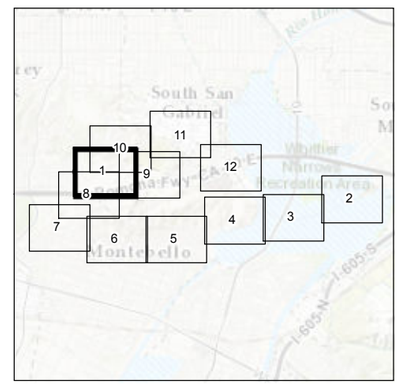
Figure 9:
Vegetation Communities
Map 1 of 12

Mesa 500 kV Substation Project

- Survey Area/Project Area
- Action Area
- City Boundary
- Existing Substation

Vegetation Communities

- California Annual Grassland (CAG)
- California Walnut Woodland (CWW)
- Coast Live Oak Woodland (CLOW)
- Coastal Sage Scrub (CSS)
- Disturbed/Developed (DEV)
- Mulefat Scrub (MFS)
- Non-Native Giant Reed (NNGR)
- Non-Native Woodland (NNW)
- Riparian Woodland (RIPW)
- Ruderal (RUD)
- Southern Sycamore-Alder Riparian Woodland (SSARW)
- Ephemeral Drainage (ED)
- Intermittent Drainage (ID)
- Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

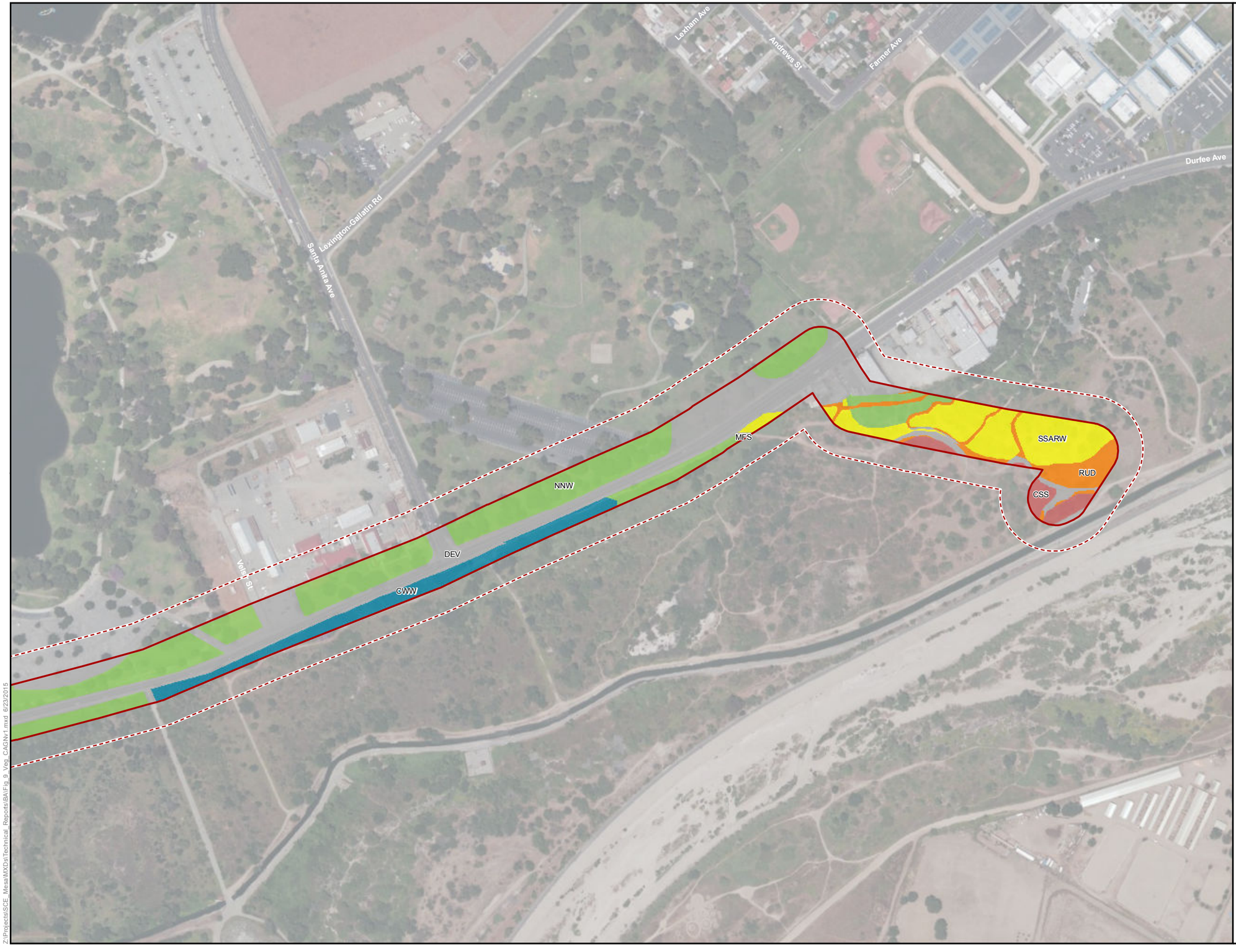
N

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_9_Veg_CACNv1.mxd 6/23/2015

Figure 9:
Vegetation Communities
Map 2 of 12

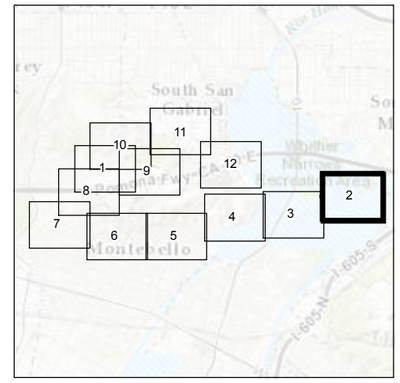
Mesa 500 kV Substation Project



Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

- California Annual Grassland (CAG)
- California Walnut Woodland (CWW)
- Coast Live Oak Woodland (CLOW)
- Coastal Sage Scrub (CSS)
- Disturbed/Developed (DEV)
- Mulefat Scrub (MFS)
- Non-Native Giant Reed (NNGR)
- Non-Native Woodland (NNW)
- Riparian Woodland (RIPW)
- Ruderal (RUD)
- Southern Sycamore-Alder Riparian Woodland (SSARW)
- Ephemeral Drainage (ED)
- Intermittent Drainage (ID)
- Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXD\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

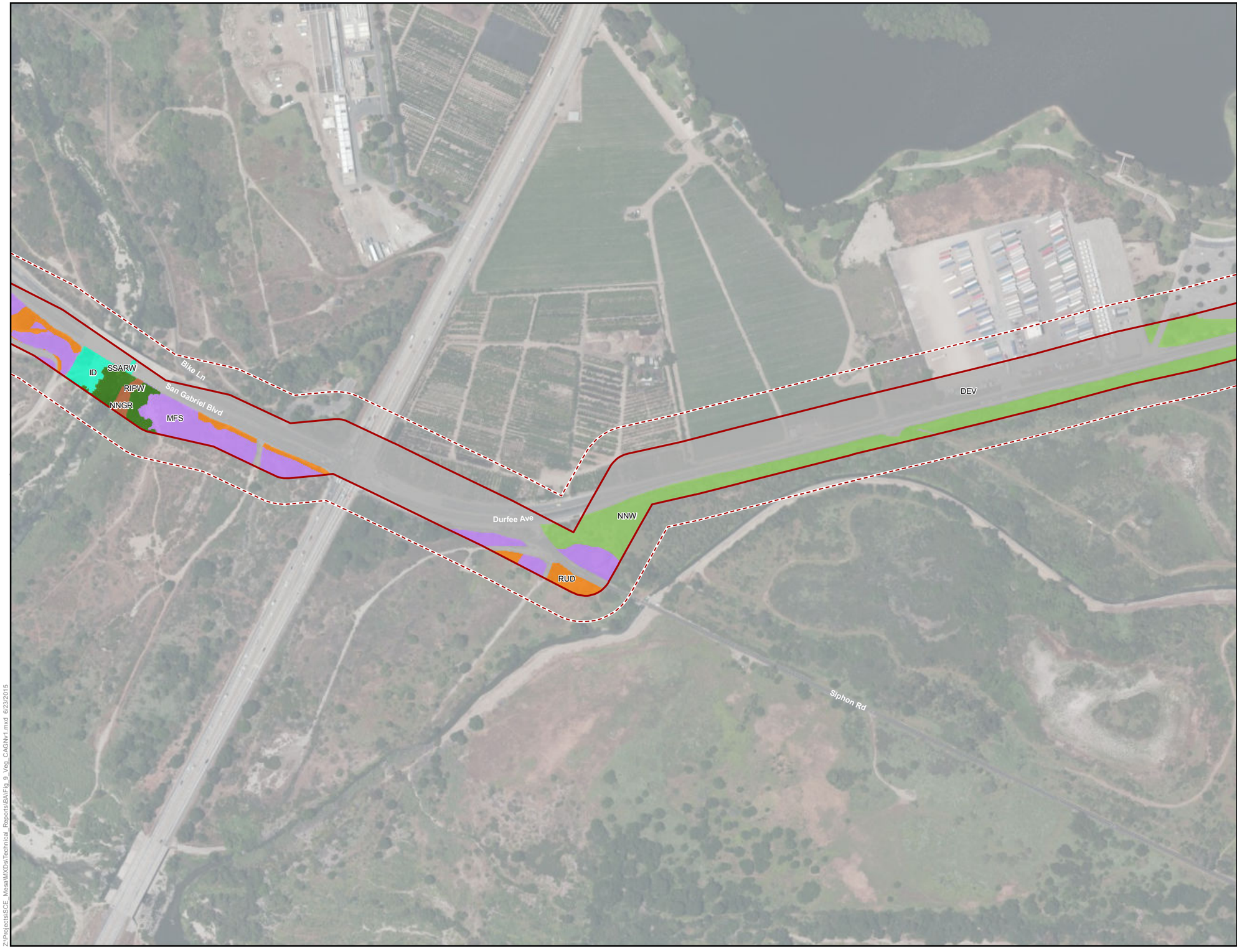
Figure 9:
Vegetation Communities
Map 3 of 12

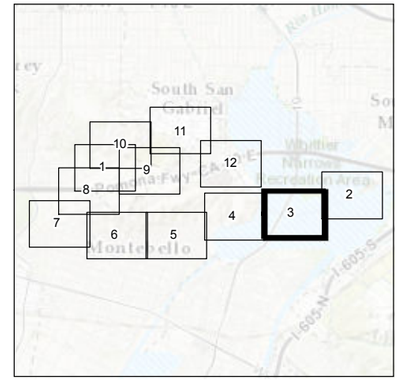
Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)





SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

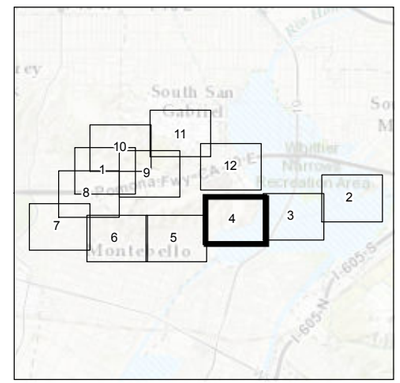
Figure 9:
Vegetation Communities
Map 4 of 12

Mesa 500 kV Substation Project

- Survey Area/Project Area
- Action Area
- City Boundary
- Existing Substation

Vegetation Communities

- California Annual Grassland (CAG)
- California Walnut Woodland (CWW)
- Coast Live Oak Woodland (CLOW)
- Coastal Sage Scrub (CSS)
- Disturbed/Developed (DEV)
- Mulefat Scrub (MFS)
- Non-Native Giant Reed (NNGR)
- Non-Native Woodland (NNW)
- Riparian Woodland (RIPW)
- Ruderal (RUD)
- Southern Sycamore-Alder Riparian Woodland (SSARW)
- Ephemeral Drainage (ED)
- Intermittent Drainage (ID)
- Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

N

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

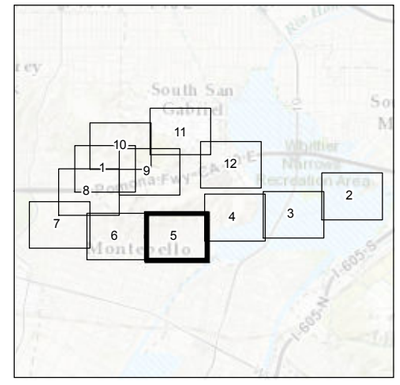
Figure 9:
Vegetation Communities
Map 5 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

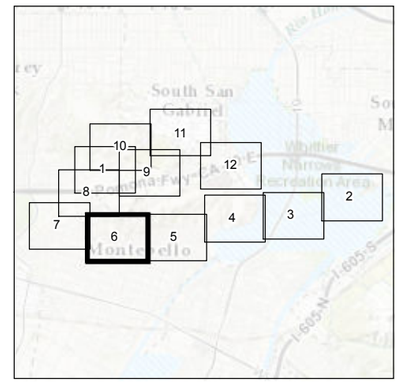
Figure 9:
Vegetation Communities
Map 6 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

Figure 9:
Vegetation Communities
Map 7 of 12

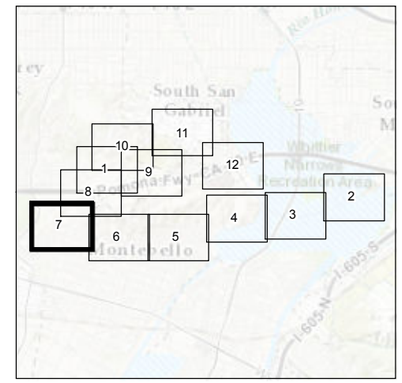
Mesa 500 kV Substation Project

RUD
CAG
NNW
DEV
Via Daviso
Via Paseo
Via Altamira
N Garfield Ave
N Hay St
Morris Pl
N Wilcox Ave
Donna Vista
Appian Way
Milano
Via Roma
Bolker Way
Brighton Way
Westmoreland Dr
Baldwin Pl
Darcy Dr
N Vail Ave
Coffman Dr
Malonia Dr
N 21st St
Cabot Pl
Merle Dr
Gardner Dr
Perry St
San Antonio Dr
Germain Dr
Loma Rd
W Lincoln Ave
N Via Val Verde
Via Camille
Via Nina
Via Acosta
Via Lucia
W Victoria Ave
N 20th St
N 19th St
N 18th St
N 21st St
N Concourse Ave
Belmont St
Libre Plz
W Beverly Blvd
W Beverly Blvd

- Survey Area/Project Area
- Action Area
- City Boundary
- Existing Substation

Vegetation Communities

- California Annual Grassland (CAG)
- California Walnut Woodland (CWW)
- Coast Live Oak Woodland (CLOW)
- Coastal Sage Scrub (CSS)
- Disturbed/Developed (DEV)
- Mulefat Scrub (MFS)
- Non-Native Giant Reed (NNGR)
- Non-Native Woodland (NNW)
- Riparian Woodland (RIPW)
- Ruderal (RUD)
- Southern Sycamore-Alder Riparian Woodland (SSARW)
- Ephemeral Drainage (ED)
- Intermittent Drainage (ID)
- Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXDs\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

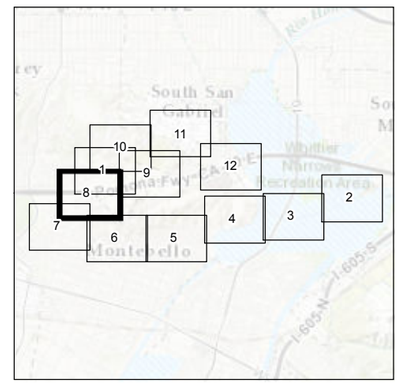
Figure 9:
Vegetation Communities
Map 8 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXD\aTechnical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

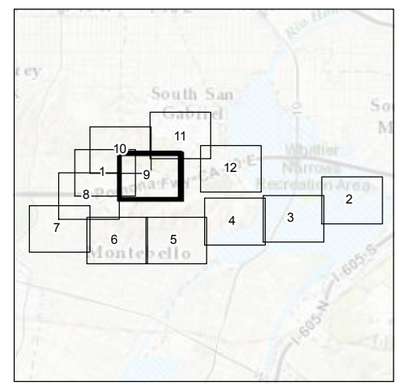
Figure 9:
Vegetation Communities
Map 9 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Potrero Grande Dr
NNW
MIW
DEV
ED
MFS
CSS
Greenwood Rd
State Rte 60
Pomona Fwy
RUD
Rainbow Terrace Ln
Mountain Terrace Ln
Ridge Terrace Ln
Neil Armstrong St
Paramount Blvd
N Montebello Blvd

Z:\Projects\SCE_MesaMXDs\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

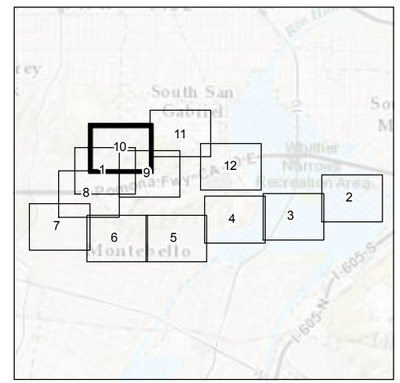
Figure 9:
Vegetation Communities
Map 10 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXD\s\Technical_Reports\BA\Fig_9_Veg_CAGNv1.mxd 6/23/2015

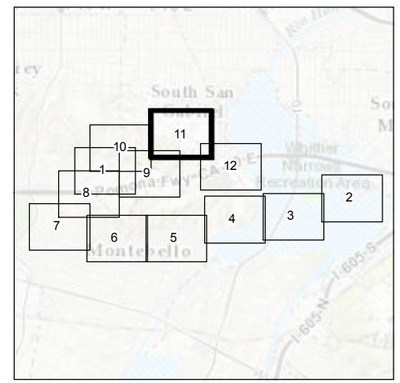
Figure 9:
Vegetation Communities
Map 11 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXD\Technical_Reports\BA\Fig_9_Veg_CAGNw1.mxd 6/23/2015

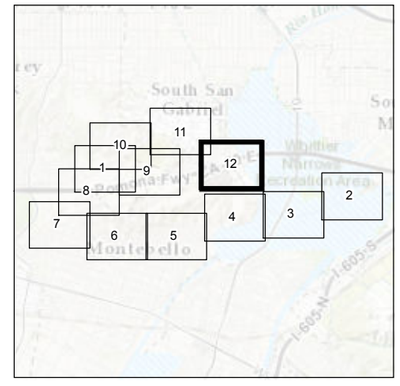
Figure 9:
Vegetation Communities
Map 12 of 12

Mesa 500 kV Substation Project

Survey Area/Project Area
Action Area
City Boundary
Existing Substation

Vegetation Communities

California Annual Grassland (CAG)
California Walnut Woodland (CWW)
Coast Live Oak Woodland (CLOW)
Coastal Sage Scrub (CSS)
Disturbed/Developed (DEV)
Mulefat Scrub (MFS)
Non-Native Giant Reed (NNGR)
Non-Native Woodland (NNW)
Riparian Woodland (RIPW)
Ruderal (RUD)
Southern Sycamore-Alder Riparian Woodland (SSARW)
Ephemeral Drainage (ED)
Intermittent Drainage (ID)
Man-Induced Wetland (MIW)



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:4,200
0 200 400 Feet

Z:\Projects\SCE_Mesa\MXD\a\Technical_Reports\BA\Fig_9_Veg_CACNv1.mxd 6/23/2015

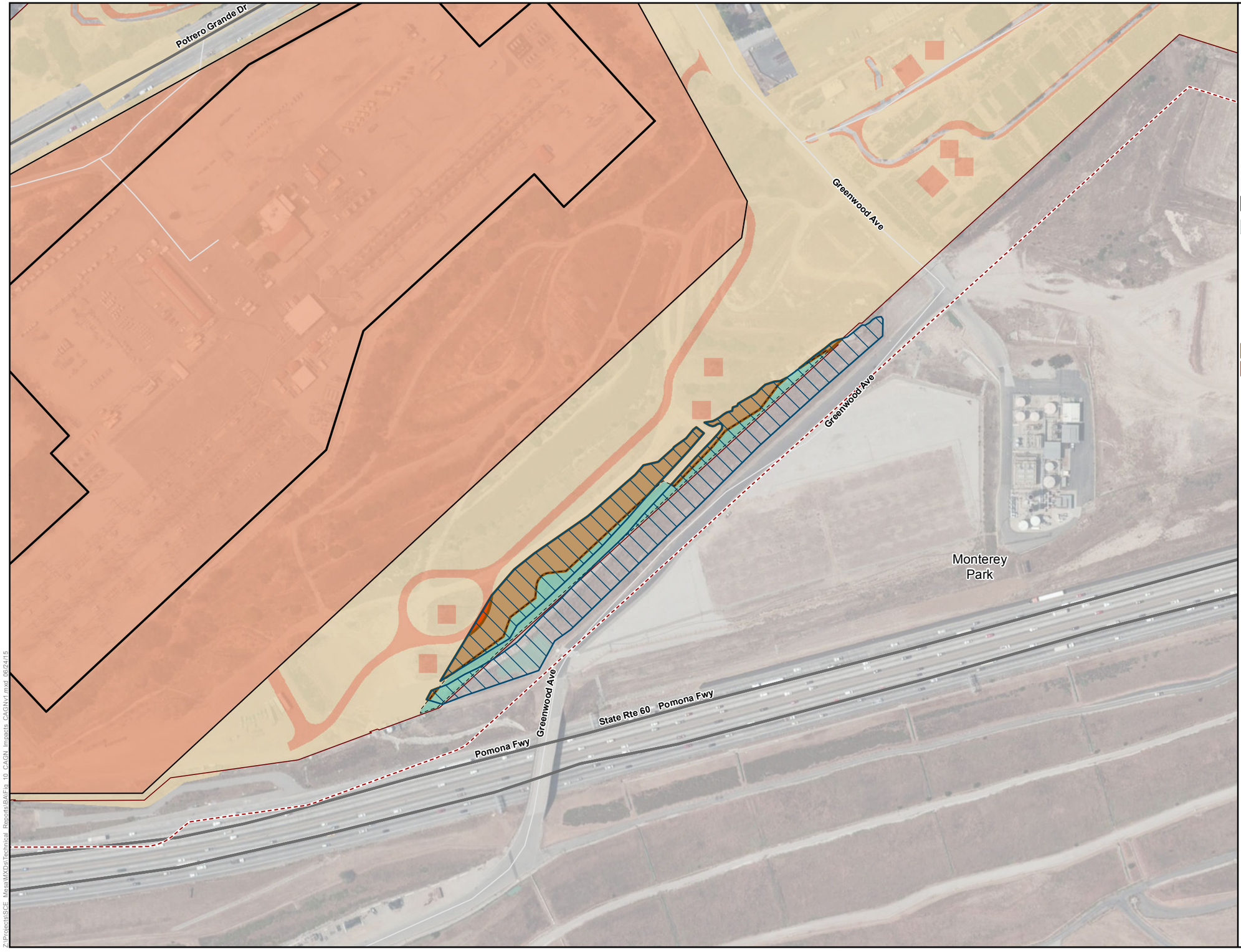


Figure 10:
Anticipated Impacts to Coastal California Gnatcatcher Habitat

Mesa 500 kV Substation Project

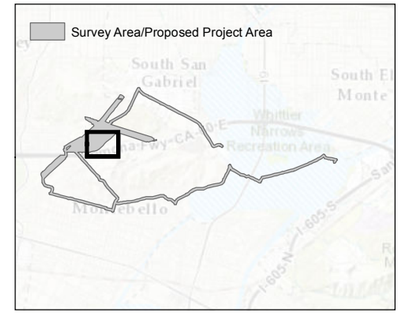
- Survey Area/Project Area
- Action Area
- Proposed Substation Perimeter Wall
- Existing Substation
- Coastal California Gnatcatcher Occupied Breeding Habitat

Project Impacts

- Temporary
- Permanent
- No Impact (Restricted Use Area)

Anticipated Impacts to Coastal California Gnatcatcher Habitat

- Temporary
- Permanent



SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

INSIGNIA ENVIRONMENTAL

1:2,400
0 100 200 300 Feet

Z:\Projects\SCE_Mesa\MXD\aTechnical Reports\BA\Fig. 10_CAGN_Impacts_CAGNv1.mxd 06/24/15

ATTACHMENT A: COASTAL CALIFORNIA GNATCATCHER SURVEY REPORT

ROCKS
BIOLOGICAL CONSULTING

June 2, 2015

U.S. Fish and Wildlife Service
Attn: Stacey Love
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

Subject: 45-day Report for Protocol Coastal California Gnatcatcher Surveys for the Proposed Southern California Edison Mesa 500 kilovolt Substation Project, Los Angeles County, California

Ms. Love:

This letter presents the 45-Day Report for U.S. Fish and Wildlife Service (USFWS) protocol breeding season surveys for the coastal California gnatcatcher (CAGN; *Polioptila californica californica*). Surveys were conducted for the proposed Southern California Edison (SCE) Mesa 500 kilovolt (kV) Substation Project (project) in Los Angeles County, California. Rocks Biological Consulting (RBC) performed the surveys described in this report under contract to Insignia Environmental.

The project is located primarily in the City of Monterey Park, with other project features within unincorporated areas of Los Angeles County and Montebello, Rosemead, South El Monte, Commerce, Bell Gardens, and Pasadena, California. The project is within the El Monte and Los Angeles U.S. Geological Survey (USGS) 7.5-minute series quadrangle maps (Figure 1). These surveys were performed in support of a Biological Assessment (BA) for a formal Section 7 consultation with the USFWS.

The 2015 CAGN survey area was determined by creating a 150-foot buffer around all project features using a Geographic Information System (GIS) and surveying all suitable CAGN habitat within the buffer. Suitable CAGN habitat observed within or immediately adjacent to the buffer area included moderate and high quality coastal sage scrub (CSS), disturbed/fragmented CSS, revegetated CSS, and ruderal, weedy areas in close proximity to CSS. The dominant species within suitable habitat included California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), lemonadeberry (*Rhus integrifolia*), and laurel sumac (*Malosma laurina*).

Non-suitable habitats within the project area included developed areas, highly disturbed areas with low-growing annual vegetation, dirt roads, agricultural fields, and riparian habitat and ornamental vegetation that are not immediately adjacent to CSS.

5101 SEPTEMBER STREET ● SAN DIEGO, CA 92110-1118
619.508.3803 ● LEE@ROCKSBIO.COM

Survey methodology followed the USFWS presence/absence survey protocol (1997) for non-NCCP areas, which requires six (6) protocol surveys be conducted during the CAGN breeding season (March 15 – June 30). Surveyors Lee Ripma (TE–221290–3.1) and Garrett Huffman (TE–20168A–0) conducted the surveys weekly across approximately 80 acres of suitable habitat at a rate of approximately 8 acres/hour. Taped vocalizations were used sparingly to elicit a CAGN response and were ceased upon hearing or observing a CAGN.

Please see Table 1 for survey dates, times, and conditions. The attached figures (1–3E) show the survey area, survey route, and location of observed CAGN. A list of the 56 bird species observed during the survey is included as Appendix A.

Table 1. Survey Conditions During California Gnatcatcher Surveys at the Proposed Southern California Edison Mesa 500 kilovolt Substation Project, Los Angeles County, California

CAGN Survey	Date	Surveyor	Time (Start-End)	Temp F (Start-End)	Cloud Cover (Start-End)	Wind Range in mph (Start-End)
#1	4/9/2015	Lee Ripma	0630-1155	52.7-78.7	20-0	0-1, 2-4
#1	4/10/2015	Lee Ripma	0640-1158	51.7-75.5	30-40	0-2, 1-3
#2	4/17/2015	Garrett Huffman	0600-1200	55-87	0-0	1-2, 1-3
#2	4/17/2015	Lee Ripma	0605-1105	54.8-72.4	0-0	1-3, 0-2
#3	4/23/2015	Garrett Huffman	0600-1200	57-73	70-60	0-2, 1-3
#3	4/24/2015	Lee Ripma	0550-1045	56.8-64.2	90-100	0-2, 1-3
#4	4/30/2015	Lee Ripma	0605-1145	57.8-95.5	5-30	0-2, 2-4
#4	5/1/2015	Lee Ripma	0610-1135	56.1-88.2	25-15	0-1, 2-4
#5	5/7/2015	Lee Ripma	0610-1150	60.5-71.3	95-90	0-1, 2-5
#5	5/8/2015	Lee Ripma	0615-1140	50.4-66.7	30-95	2-4, 0-2
#6	5/14/2015	Lee Ripma	0620-1155	59.6-71.2	60-100	0-1, 0-2
#6	5/15/2015	Lee Ripma	0610-1200	52.9-62.9	100-95	0-1, 2-4

Two pairs of CAGN were observed nesting within approximately 550 feet of each other at the Mesa Substation site (Figure 3A). During surveys 1–3, both pairs were observed in various stages of nest building, incubation, and/or caring for nestlings. During surveys 4–6, the two pairs were observed tending to their fledges. One pair had three fledges foraging with them and the other had two.

In addition CAGN were observed along the associated transmission, subtransmission, distribution, and telecommunications line areas (Figures 3B–3E). Four pairs of CAGN were consistently observed within the high quality CSS along the north side of Lincoln Avenue at the

base of the Montebello Hills oilfield (Figure 3C). The CSS in this area is USFWS-designated critical habitat for CAGN. These four CAGN pairs were observed on all six surveys in the same locations. Due to restricted access on private property, actual nests were not observed during surveys; however, all four CAGN pairs exhibited nesting behavior and three CAGN pairs were observed with fledges during later surveys. As such, three of these four pairs are mapped as CAGN nesting pairs with fledges and one is mapped as a nesting CAGN pair on Figure 3C.

In addition, one adult and one juvenile were observed foraging together south of N. Durfee Ave. during the final survey, but no nesting activity was observed during the first five surveys (Figure 3D). It is likely that these CAGN are primarily using the suitable habitat south of the survey area and occasionally forage in this area. This portion of the alignment is also within critical habitat for CAGN.

In summary, a total of six pairs of CAGN were observed nesting or exhibiting nesting behavior within the survey area during the 2015 breeding season surveys. One adult and one juvenile were also observed foraging within the survey area, but nesting behavior was not observed.

Please feel free to call me at (619) 508-3803 should you have any questions or concerns.

We certify that the information in this survey report and attached figures fully and accurately represent our work.

Sincerely,

Lee Ripma
TE-221290-3.1

Garrett Huffman
TE-20168A-0

Enclosures: Appendix A – Bird Species Observed
Figure 1 – USGS Quadrangle Map
Figure 2 – Coastal California Gnatcatcher Survey Area Overview
Figures 3A – 3E - Coastal California Gnatcatcher 2015 Survey Results

Appendix A. Bird Species Observed During Coastal California Gnatcatcher Protocol Surveys at the Proposed Southern California Edison Mesa 500 kilovolt Substation Project, Los Angeles County, California

Common Name	Scientific Name
Allen's hummingbird	*Selasphorus sasin*
American kestrel	*Falco sparverius*
Anna's hummingbird	*Calypte anna*
ash-throated flycatcher	*Myiarchus cinerascens*
Bewick's wren	*Thryomanes bewickii*
black phoebe	*Sayornis nigricans*
black-headed grosbeak	*Pheucticus melanocephalus*
blue grosbeak	*Passerina caerulea*
brown-headed cowbird*	*Molothrus ater*
bushtit	*Psaltriparus minimus*
cactus wren	*Campylorhynchus brunneicapilus*
coastal California gnatcatcher	*Polioptila californica californica* (FT)
California quail	*Callipepla californica*
California thrasher	*Toxostoma redivivum*
California towhee	*Melozone crissalis*
Cassin's kingbird	*Tyrannus vociferans*
cedar waxwing	*Bombycilla cedrorum*
cliff swallow	*Petrochelidon pyrrhonota*
common raven	*Corvus corax*
common yellowthroat	*Geothlypis trichas*
Cooper's hawk	*Accipiter cooperii* (WL)
double-crested cormorant	*Phalacrocorax auritus*
European starling*	*Sturnus vulgaris*
great blue heron	*Ardea herodias*
great egret	*Ardea alba*
great-tailed grackle	*Quiscalus mexicanus*
hooded oriole	*Icterus cucullatus*
house finch	*Carpodacus mexicanus*
house wren	*Troglodytes aedon*
killdeer	*Charadrius vociferus*
Lazuli bunting	*Passerina amoena*
least Bell's vireo	*Vireo bellii pusillus* (FE, SE)
lesser goldfinch	*Spinus psaltria*
mallard	*Anas platyrhynchos*
mourning dove	*Zenaida macroura*
northern mockingbird	*Mimus polyglottos*
northern rough-winged swallow	*Stelgidopteryx serripennis*
Nuttall's woodpecker	*Picoides nuttallii*
orange-crowned warbler	*Oreothlypis celata*
pacific-slope flycatcher	*Empidonax difficilis*
phainopepla	*Phainopepla nitens*

red-tailed hawk	*Buteo jamaicensis*
rock pigeon*	*Columba livia*
rufous hummingbird	*Selasphorus rufus*
Say's phoebe	*Sayornis saya*
song sparrow	*Melospiza melodia*
spotted towhee	*Pipilo maculatus*
Swainson's thrush	*Catharus ustulatus*
warbling vireo	*Vireo gilvus*
western kingbird	*Tyrannus verticalis*
western scrub-jay	*Aphelocoma californica*
western tanager	*Piranga ludoviciana*
white-throated swift	*Aeronautes saxatalis*
Wilson's warbler	*Cardellina pusilla*
yellow warbler	*Setophaga petechia* (SSC)
yellow-breasted chat	*Icteria virens* (SSC)

FE: Listed as Endangered by USFWS
FT: Listed as Threatened by USFWS
SE: Listed as Endangered by California Department of Fish and Wildlife
WL: California Department of Fish and Wildlife Watch List
SSC: California Department of Fish and Wildlife Species of Special Concern
*Introduced Species

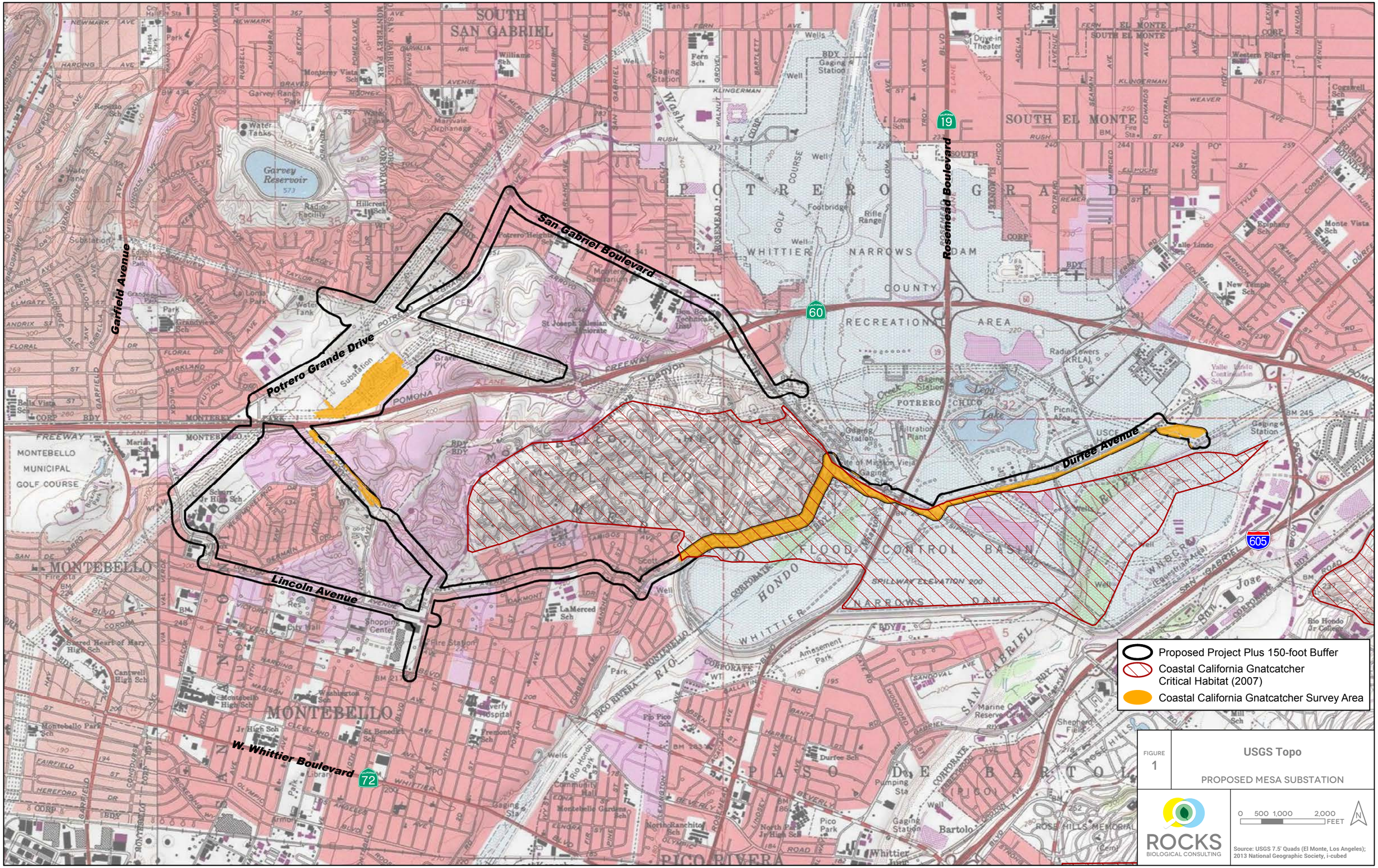


FIGURE 1

USGS Topo

PROPOSED MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 500 1,000 2,000 FEET

Source: USGS 7.5' Quads (El Monte, Los Angeles); 2013 National Geographic Society, i-cubed

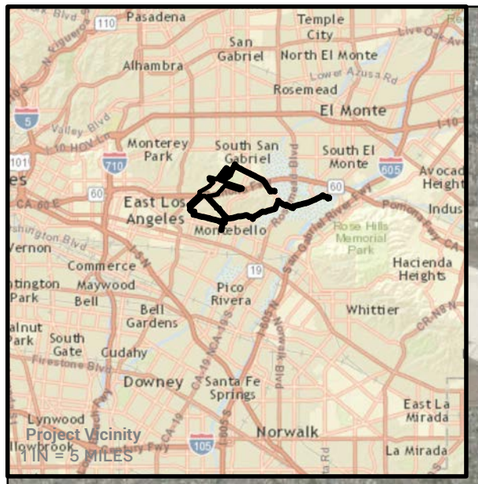


Fig. 3A

Fig. 3B

Fig. 3C

Fig. 3D

Fig. 3E

San Gabriel Boulevard

Rosemead Boulevard

Garfield Avenue

Potrero Grande Drive

Durfee Avenue

Lincoln Avenue

W. Whittier Boulevard

19

60

605

72

Proposed Project Plus 150-foot Buffer

Coastal California Gnatcatcher Critical Habitat (2007)

Coastal California Gnatcatcher Survey Area

2015 CAGN Nest

2015 CAGN Nesting Pair

2015 CAGN Nesting Pair with Fledges

2015 CAGN Observation (Not associated with a nest)

FIGURE 2

Coastal California Gnatcatcher Survey Area Overview

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 500 1,000 2,000 FEET

N

Source: Google, Esri

Google

FIGURE 3A

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 75 150 300 FEET

N

Source: Google

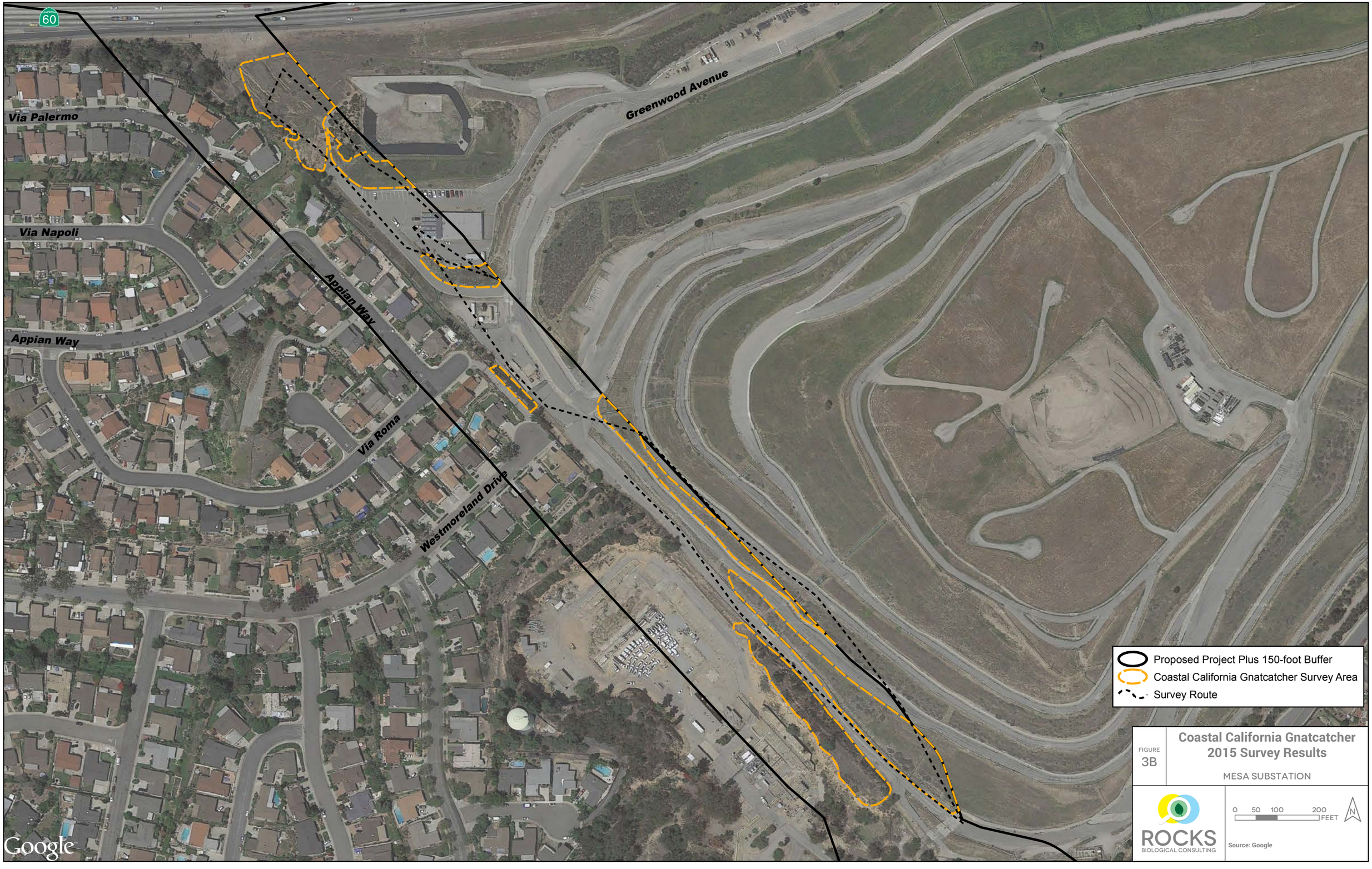


FIGURE 3B

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 50 100 200 FEET

N

Source: Google

FIGURE 3C

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 75 150 300 FEET

N

Source: Google

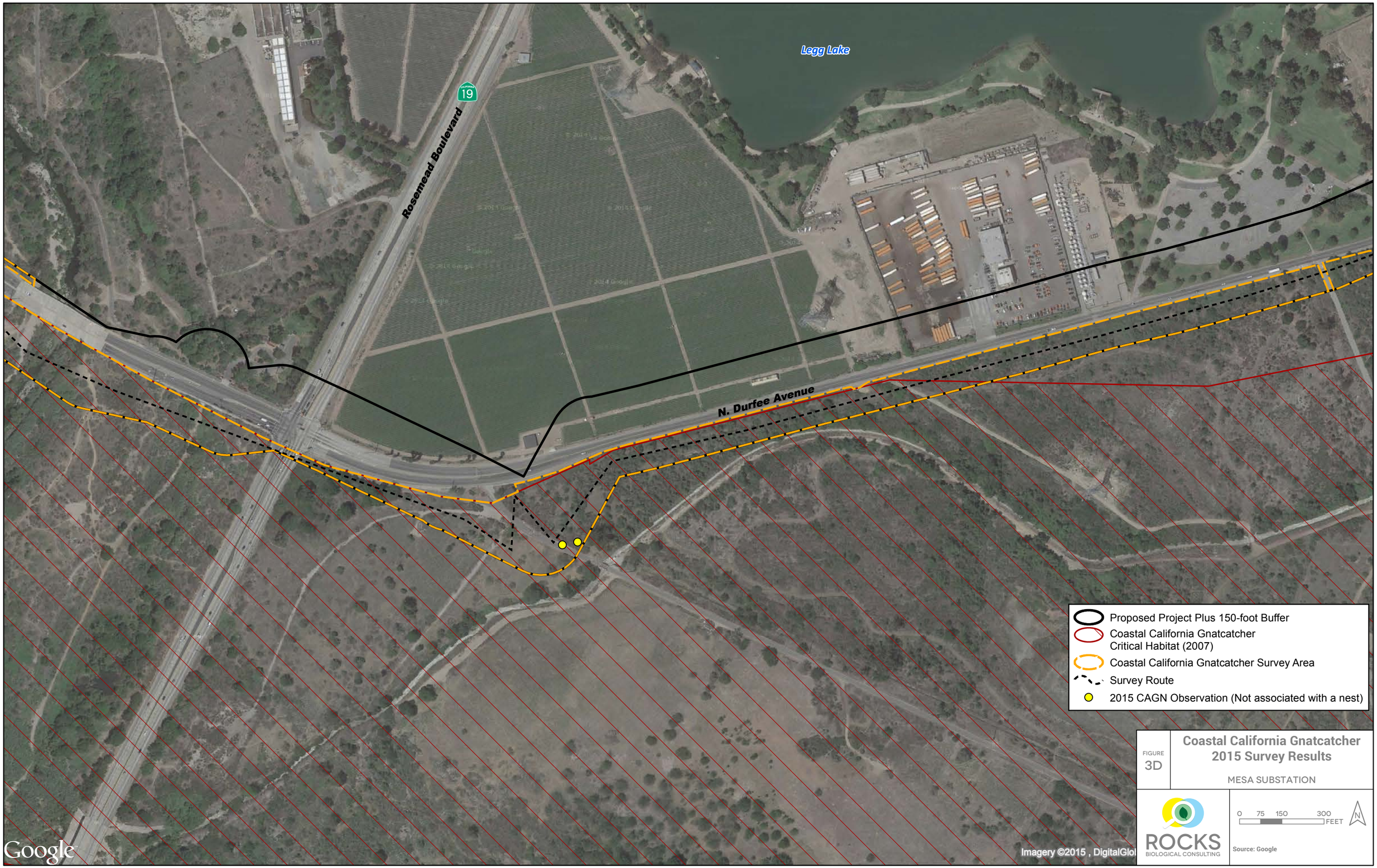


FIGURE 3D

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

FIGURE 3E

Coastal California Gnatcatcher 2015 Survey Results

MESA SUBSTATION

ROCKS BIOLOGICAL CONSULTING

0 75 150 300 FEET

N

Source: Google

ATTACHMENT B: REPRESENTATIVE PHOTOGRAPHS

ATTACHMENT B: REPRESENTATIVE PHOTOGRAPHS

Photograph 1:
Ruderal grassland and disturbed/developed vegetation at the Mesa Substation site.

Photograph 2:
Disturbed riparian vegetation at the Mesa Substation site.

Photograph 3:
Ruderal vegetation at the Mesa Substation site.

Photograph 4:
Mule fat scrub within the Proposed Project area.

Photograph 5:
Sparsely vegetated ephemeral channel at the Mesa Substation site.

Photograph 6:
Coastal sage scrub south of the Mesa Substation.

Photograph 7:
Dense coastal sage scrub north of Lincoln Avenue in the Montebello Hills area.

Photograph 8:
Coastal sage scrub north of Lincoln Avenue in the Montebello Hills area.

Photograph 9:
The Rio Hondo Corridor within the Proposed Project.

Photograph 10:
Sparse scrub habitat at the Whittier Narrows Recreation Area.

ATTACHMENT F: HISTORIC PROPERTIES AND CULTURAL RESOURCES SUMMARY

Information in Attachment F is sensitive and may be available upon request