



**Draft Mitigated Negative Declaration**  
Project (A.06-12-032)

**Southern California Edison's**  
**Kimball Substation**  
Chino, California

*Prepared For:*  
**California Public Utilities Commission**



*Prepared By:*  
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April 2009



Draft Initial Study/  
Mitigated Negative  
Declaration (IS/MND)  
Kimball Substation Project  
Chino, California

**April 2009**

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## ES.0 EXECUTIVE SUMMARY

### ES.1 INTRODUCTION

Southern California Edison (SCE), in its California Public Utilities Commission (CPUC) application (A.06-12-032), seeks a Permit to Construct (PTC) for the proposed project, which consists of: (i) the construction of a 66/12 kilovolt (kV) substation (Kimball Substation) on an approximately 2-acre site located in the City of Chino; (ii) the modification of approximately 6.7 miles of the Chino-Corona-Pedley 66 kV subtransmission line and construction of two 340-foot underground 66 kV subtransmission lines that will connect Kimball Substation through a tubular steel pole (TSP) riser to an existing 66 kV overhead transmission line; (iii) the addition of a second 66 kV subtransmission line circuit to an approximately 0.9 mile segment of the Archibald-Chino-Corona 66 kV subtransmission line and construction of a new 0.4 mile segment within public street rights-of-way to connect the Chino-Corona-Pedley 66 kV line to the Archibald-Chino-Corona 66 kV line (these modifications would form the new Chino-Cimgen-Kimball 66 kV subtransmission line); (iv) construction of six 12 kV underground circuits extending from the proposed Kimball Substation to the nearest public street; and (v) installation of new fiber optic cable and communication equipment to connect the Kimball Substation to SCE's existing telecommunication system.

If SCE's application is approved by the CPUC, SCE proposes to begin construction activities in 2009. This Draft MND considers environmental impacts that would occur from the potential development and operation of the cable line and associated project components as proposed by SCE. The analysis of this Draft MND concludes that any environmental impacts associated with SCE's proposed project can be mitigated to a less than significant level with implementation of mitigation measures identified in this document.

### ES.2 DOCUMENT ORGANIZATION

The Draft Final MND is organized as follows:

- This Executive Summary introduces the project, describes the method for reviewing and submittal of comments, describes the organization of the document, and provides a summary of the impacts and mitigation measures.
- The Project Description (Section 1) provides objectives and components of the proposed project and details of proposed construction activities.
- The Impacts Discussion (Section 2) includes all required California Environmental Quality Act (CEQA) checklist items and a discussion of the impacts and their significance for the proposed project.
- The Reference Section (Section 3) includes a full list of references that were used in the preparation of this Draft MND
- The Environmental Determination (Section 4) includes a statement by the CPUC as to the type of environmental review that is required.
- The Summary of Preparers and Consultants (Section 5) summarizes the names and affiliation of persons involved with development of this MND.
- The Appendices include all technical material prepared to support the analysis.

## ES.3 PROJECT DESCRIPTION

The Kimball Substation Project (proposed project) contains the following components:

- Construction of a new 66/12 kilovolt (kV) substation. The proposed substation would be constructed on an approximately 2-acre site in the City of Chino, California. The proposed substation would be an unmanned, automated, low-profile, 56 megavolt-ampere (MVA) 66/12 kV substation. The proposed substation would include underground distribution circuits leaving the substation, a perimeter wall surrounding the substation equipment with a gate to provide access in and out of the substation, and an access road to the substation from the public road.
- Modification of approximately 6.7 miles of the existing Chino-Corona-Pedley 66 kV subtransmission line and the construction of two new 340-foot long underground circuits to extend the Chino-Corona-Pedley line into the proposed substation. The existing lines to be modified are located in either SCE-owned rights-of-way or public street rights-of-way. Along approximately 5.6 miles of the line, the existing wood poles would be replaced with lightweight steel (LWS) poles and the conductor would be replaced. Along approximately 1.1 miles of the line, the conductor would be replaced on existing LWS poles. These modifications would form the new Chino-Kimball 66 kV subtransmission line.
- Addition of a second circuit to an approximately 0.9 mile segment of the existing Archibald-Chino-Corona 66 kV subtransmission line and construction of a new 0.4 mile segment within public street rights-of-way to connect the Chino-Corona-Pedley 66 kV line to the Archibald-Chino-Corona 66 kV line. These modifications would form the new Chino-Cimgen-Kimball 66 kV subtransmission line.
- Construction of six 12 kV underground circuits extending from the proposed substation to the nearest public street.
- Installation of new fiber-optic cable and communication equipment to connect the proposed Kimball Substation to SCE's existing telecommunication system.

## ES.4 POTENTIAL ENVIRONMENTAL IMPACTS

The attached Mitigated Negative Declaration presents and analyzes potential environmental impacts that would result from for construction and operation of the new transmission line and substation modifications, and proposes mitigation measures, as appropriate.

Based on the Mitigated Negative Declaration, approval of the application would have no impact or less than significant effects in the following areas:

- Agricultural Resources
- Mineral Resources
- Population and Housing
- Noise
- Public Services
- Utilities

The Draft Mitigated Negative Declaration indicates that approval of the application would result in potentially significant impacts in the areas of:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Hazards and Hazardous Materials
- Land Use and Planning
- Transportation and Traffic
- Mandatory Findings of Significance

### ES.5 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Please refer to Table ES-1 on the following page.

**Table ES-1. Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Aesthetics</i>			
Implementation of the proposed project would substantially degrade the existing visual character or quality of the site and its surroundings.	Significant	MM AES1: The substation shall be screened behind an 8-foot high perimeter wall with exterior drought tolerant landscaping.	Less than significant
<i>Air Quality</i>			
Under state and federal standards, the proposed project is located in a non-attainment area for O3, PM <sub>10</sub> , and PM <sub>2.5</sub> . Implementation of the proposed project would contribute substantially to an existing air quality violation.	Significant	<p>MM Air1: SCE shall prepare a Construction Emissions Control Plan that outlines SCE's approach for ensuring that daily construction emissions do not exceed the SCAQMD's significance thresholds for construction activities. The plan shall be submitted to the CPUC for review and approval at least 30 days prior to the estimated start of construction activities. SCE shall require the approved plan to be implemented during all construction activities. The plan shall include, at a minimum, the following requirements:</p> <ul style="list-style-type: none"> <li>• A detailed description of construction activity phasing that would be required to ensure that emissions remain below SCAQMD daily significance thresholds. All assumptions and rationale for all assumptions, including truck trips per day, miles per trip, daily equipment inventories, equipment hours, and amounts of total areas and volumes of material to be disturbed shall be defined in the plan.</li> <li>• All construction material deliveries shall be scheduled to occur outside of peak traffic hours (7:00 to 10:00 a.m. and 4:00 to 7:00 pm) to the extent feasible; truck trips during peak traffic hours shall be minimized to the extent feasible.</li> <li>• Engine idle time shall be restricted to no more than five minutes in duration.</li> <li>• All on-road construction vehicles shall be licensed.</li> <li>• All off-road stationary and portable gasoline powered equipment shall have USEPA Phase 1/Phase 2 compliant engines.</li> </ul>	Less than significant
Implementation of the proposed project would result in GHG emissions.	Significant	MM GHG1: SCE shall replace a circuit breaker with an SF6 capacity of at least 30 pounds that is estimated to be leaking at a rate of at least six percent of its SF6 content each year. At the time of replacement, the circuit breaker to be replaced shall have an expected remaining life of at least two additional years. The replacement breaker shall have a one percent leakage rate guaranteed by manufacturers. SCE shall provide documentation to the	Less than significant

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<p>CPUC that verifies that the replacement has occurred prior to commencement of project operations, and that the replaced circuit breaker has been permanently removed from service (e.g., destroyed or recycled as scrap metal).</p> <p>MM GHG2: Prior to the commencement of operations of the Kimball Substation project, SCE shall replace four diesel powered forklifts that have horsepower (hp) ratings of at least 50 hp with electric forklifts. SCE shall provide documentation to the CPUC that verifies the replacement has occurred, and that the replaced forklifts have been permanently removed from SCE's equipment inventory.</p>	
<i>Biological Resources</i>			
<p>Implementation of the proposed project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS).</p>	Significant	<p>MM Bio1: If construction activities are to occur during the nesting season (February 1 through August 31), a preconstruction survey shall be conducted by a qualified biologist at least one week prior to the commencement of construction activities to determine the presence/absence of active nests on the construction site. If an active nest is found, an adequate buffer shall be established around the nest and construction shall be prohibited within this designated area until the juveniles fledge. Construction buffers of 300 feet would only apply to the portion of the project site where the active nest is located. If vegetation or structures containing a raptor nest must be removed during the nesting season, or if work is scheduled to take place in close proximity to an active nest in vegetation or an existing structure, SCE would coordinate with the CDFG and USFWS and obtain written concurrence prior to moving the nest. Construction activities may continue within the project site if the activities take place outside of the designated buffer. (In practice, the presence of an active nest on the proposed substation site would halt construction of the substation because the buffer would incorporate the entire site; however, an active nest located within the alignment would only halt construction within a specific portion of the alignment.)</p> <p>MM Bio2: All new structures shall be designed to be raptor safe in accordance with current standards and guidelines.</p> <p>MM Bio3: A preconstruction burrowing owl survey shall be conducted no more than 30 days prior to the commencement of ground disturbing activities along the segment of the alignment that parallels Magnolia Avenue between Edison and Kimball Avenues to determine if any occupied burrows are present. If nesting pairs are found, adequate buffers shall be established around</p>	Less than significant

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		occupied burrows (50 meters/160 feet) from non-breeding burrows and 75 meters (250 feet) from breeding burrows) during the breeding season (February 1-August 31). If active burrows cannot be avoided, an appropriate relocation strategy would be developed in conjunction with the CDFG and may include: collapsing burrows outside of nesting season and the use of exclusionary devices to reduce impacts to the burrowing owl.	
Implementation of the proposed project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Significant	Bio1–Bio3	Less than significant
<i>Cultural Resources</i>			
Implementation of the proposed project may encounter currently unknown cultural resources, either prehistoric or historic, pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g).	Significant	<p>MM Cul1: In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and SCE and/or the CPUC shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of SCE and/or the CPUC and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, as necessary and a report prepared by a Specialist according to current professional standards.</p> <p>In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the CPUC shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g. data recovery) shall be instituted. Work may proceed on other parts of the proposed project site while mitigation for historical resources of unique archaeological resources is carried out.</p> <p>If the CPUC, in consultation with the qualified archaeologist, determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, the CPUC shall require SCE to:</p>	Less than Significant

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Re-design the proposed project to avoid any adverse effect on the significant archeological resource; or</li> <li>• Implement an archeological data recovery program (ADRP) unless the qualified archaeologist determines that the archeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.</li> </ul>	
Implementation of the proposed project may result in accidental discovery of human remains.	Significant	<p>MM Cul2: If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 dictates that no further disturbance would occur until the County Coroner has made the necessary findings as to origin and disposition of the remains pursuant to Public Resources Code Section 5097.98.</p> <p>Should human remains be identified as a Native American burial, the Native American Heritage Commission shall be contacted to determine the appropriate repatriation efforts.</p>	Less than Significant

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
<i>Geology and Soils</i>			
Implementation of the proposed project would result in an estimated level of soil disturbance greater than one acre resulting in impacts associated with soil erosion and loss of topsoil.	Significant	<p>MM Geo1: The applicant shall obtain a National Pollutant Discharge Elimination System (NPDES) permit and prepare a Storm Water Pollution Prevention Plan (SWPPP) which meets the requirements of the Santa Ana Regional Water Quality Control Board. Specific erosion control measures would be outlined in the NPDES permit and SWPPP and would be required to be in place prior to the commencement of grading activities.</p> <p>The standard erosion control measures outlined in the NPDES permit and SWPPP would be required during surface and subsurface construction activities associated with the subtransmission and telecommunication alignments (e.g., grading, boring of holes for the LWS poles; burying of underground conductors; and TSP riser and vault installation) to reduce the erosion potential of the minor quantities of excavated soil.</p> <p>The permit shall be required prior to construction and submitted to the CPUC.</p>	Less than Significant
<i>Hazards and Hazardous Materials</i>			
Implementation of the proposed project would result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Significant	<p>MM Haz1: The design of the proposed substation shall provide containment and/or diversionary structures or equipment to prevent the discharge of oil or other hazardous material. These design features shall be included as part of the Spill Prevention Control and Countermeasure (SPCC) requirements (40 Code of Federal Regulations (CFR) Part 112.1 through Part 112.7) that would be prepared by SCE prior to construction of the substation and submitted to the CPUC.</p>	Less than Significant
Implementation of the proposed project would create a significant hazard to the public or the environment	Significant	<p>MM Haz2: In the event that contaminated soil is encountered during excavation activities along the subtransmission and/or telecommunication alignments, the soil shall be segregated and tested to determine the appropriate disposal and treatment options. Should a soil test positive for hazardous materials, the soil shall be properly transported to a Class I landfill or other appropriate soil treatment or recycling facility.</p> <p>The wooden poles to be removed as part of the subtransmission line modifications shall be either returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a Regional Water Quality Control Board (RWQCB)-approved municipal landfill.</p>	Less than Significant

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
Implementation of the proposed project would result in a safety hazard for people residing or working in the project area.	Significant	MM Haz3: Coordination with the FAA would be required during construction to ensure compliance with FAA obstruction standards (FAR 77.11 guidelines). MM Haz4: FAA notification would be required for the LWS pole installation along the portion of the alignment of the subtransmission modifications within the airport's southwest- to northeast-oriented take-off zone, approximately 2,650 feet from the end of the runway to ensure compliance with FAA obstruction standards (FAR 77.11 guidelines).	Less than significant
<i>Hydrology and Water Quality</i>			
Implementation of the proposed project would impact water quality standards.	Significant	MM Geo1	Less than significant
Implementation of the proposed project would substantially degrade water quality	Significant	MM Geo1	Less than significant
<i>Land Use and Planning</i>			
Implementation of the proposed project would conflict with an applicable habitat conservation plan.	Significant	MM Bio 3	Less than significant
<i>Traffic and Transportation</i>			
Implementation of the proposed project would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.	Significant	MM Traffic1 SCE shall implement a Traffic Control Plan (TCP) to limit potential traffic impacts to the project area. Specifically, the measures outlined in the TCP will ensure an adequate flow of traffic in both directions by providing sufficient signage to alert drivers of construction zones, notifying emergency responders prior to construction, conducting community outreach, and controlling traffic around schools. The measures shall include the following: <ul style="list-style-type: none"> <li>• To the extent feasible, truck traffic shall be scheduled for off-peak hours to reduce impacts during periods of peak traffic.</li> <li>• Truck traffic shall be phased throughout the five-week grading period and site preparation construction phase.</li> <li>• Truck traffic shall use designated truck routes when arriving to and from the proposed substation site.</li> <li>• If lane closures are required, SCE shall comply with BMPs established by the Work Area Protection and Traffic Control Manual (California Joint Utility Traffic Control Committee 1996). All</li> </ul>	Less than significant

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Environmental Impact	Significance Before Mitigation	Mitigation Measures	Significance After Mitigation
		work within public roadway rights-of-way shall be subject to the conditions established by the appropriate jurisdiction in an encroachment permit to be secured prior to initiating work within the right-of-way.	
Implementation of the proposed project would exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.	Significant	Traffic1	Less than significant
Implementation of the proposed project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Significant	Haz3 – Haz4	Less than significant
Implementation of the proposed project would result in inadequate emergency access.	Significant	MMTraffic1	Less than significant

## 1.0 PROJECT DESCRIPTION

### 1.1 PROJECT TITLE

Kimball Substation

### 1.2 PROJECT SPONSOR'S NAME AND ADDRESS

Southern California Edison Company (SCE)  
2244 Walnut Grove Avenue  
Post Office Box 800  
Rosemead, California 91770

### 1.3 LEAD AGENCY NAME AND ADDRESS

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### 1.5 PROJECT OVERVIEW

The Kimball Substation Project (proposed project) contains the following components:

- Construction of a new 66/12 kilovolt (kV) substation. The proposed substation would be constructed on an approximately 2-acre site in the City of Chino, California. The proposed substation would be an unmanned, automated, low-profile, 56 megavolt-ampere (MVA) 66/12 kV substation. The proposed substation would include underground distribution circuits leaving the substation, a perimeter wall surrounding the substation equipment with a gate to provide access in and out of the substation, and an access road to the substation from the public road.
- Modification of approximately 6.7 miles of the existing Chino-Corona-Pedley 66 kV subtransmission line and the construction of two new 340-foot long underground circuits to extend the Chino-Corona-Pedley line into the proposed substation. The existing lines to be modified are located in either SCE-owned rights-of-way or public street rights-of-way. Along approximately 5.6 miles of the line, the existing wood poles would be replaced with light weight steel (LWS) poles and the conductor would be replaced. Along approximately 1.1 mile of the line, the conductor would be replaced on existing LWS poles. These modifications would form the new Chino-Kimball 66 kV subtransmission line.
- Addition of a second circuit to an approximately 0.9 mile segment of the existing Archibald-Chino-Corona 66 kV subtransmission line and construction of a new 0.4 mile segment within public street rights-of-way to connect the Chino-Corona-Pedley 66 kV line to the Archibald-

Chino-Corona 66 kV line. These modifications would form the new Chino-Cimgen-Kimball 66 kV subtransmission line.

- Construction of six 12 kV underground circuits extending from the proposed substation to the nearest public street.
- Installation of new fiber-optic cable and communication equipment along an existing telecommunications line to connect the proposed Kimball Substation to SCE's existing telecommunication system.

### 1.6 PROJECT LOCATION

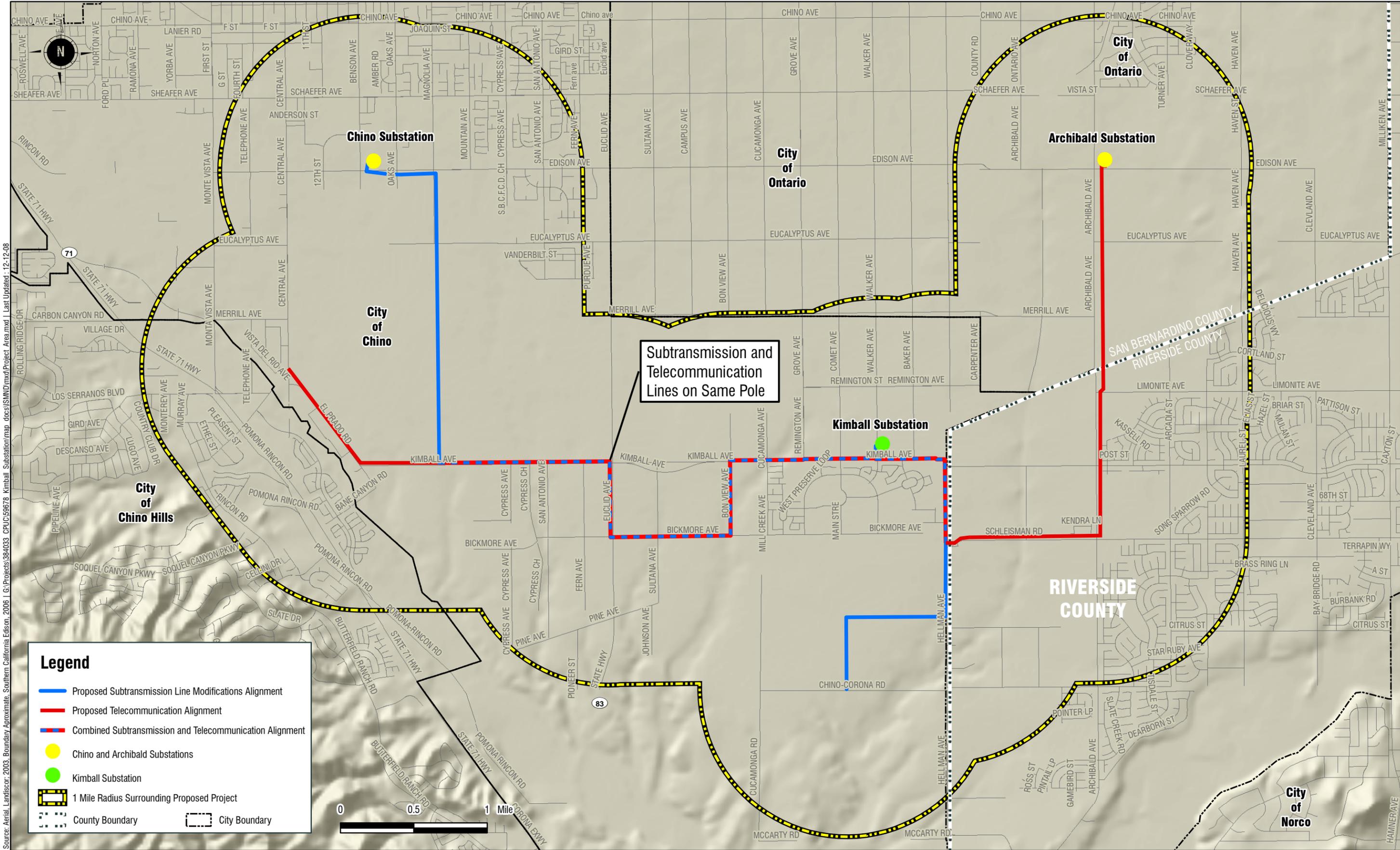
The proposed project is located within the western area portion of the "Inland Empire" (a collective term for San Bernardino and Riverside counties) in Southern California (Figure 1.6-1, Regional and Vicinity Map). The project is being proposed by SCE to improve the reliability of its electric system in the cities of Chino and Ontario and adjacent unincorporated areas in western Riverside County and southwestern San Bernardino County. The modification of subtransmission lines would take place entirely within the boundaries of the City of Chino, while the installation of telecommunication infrastructure would extend from the City of Chino to the west into unincorporated Riverside County and the City of Ontario to the east and north. The majority of the following environmental analysis (Section 3.0) focuses on a one-mile radius surrounding the proposed project (Figure 1.6-2, Project Area).

### 1.7 SURROUNDING LAND USES AND SETTING

Historically a center for dairy farming, Chino developed from a mainly rural community into a small suburban city in the 1970s. As well as expanding industrial and commercial areas within its boundaries, substantial recent residential development has occurred within southern and eastern portions of Chino. While the agricultural character of the area remains evident, primarily in southern portions of the city, the transition from primarily agricultural to residential and industrial uses is visibly underway within the project area. Land uses that surround the proposed project are varied, ranging from industrial and agricultural (crops and dairy), to residential and recreational. The proposed project is also adjacent to Chino Airport and passes through the boundaries of the California Institution for Men (a California state prison), two of the largest individual land uses within the City.

The proposed subtransmission line route begins at the Chino Substation, which is located on Edison Avenue, between Central Avenue and Mountain Avenue, in the City of Chino. Industrial and commercial areas surround the substation to the north, east and west. Ruben Ayala Park is located to the south of substation, along Edison Avenue. The proposed subtransmission line route passes through agricultural lands within the western boundaries of the California Institution for Men and adjacent to recently constructed industrial and commercial developments east of Euclid Avenue. To the west of Euclid Avenue, the route is adjacent to agricultural lands, primarily older, smaller dairy farms before passing through the newer residential areas of "The Preserve," a large, partially-complete master planned community currently under construction and primarily south of Kimball Avenue. Chino Airport, with a variety of associated industrial areas, is located to the north of Kimball Avenue. Land uses surrounding the proposed Kimball Substation site are currently agricultural (primarily dairy), but planned to be light industrial, commercial, and residential uses.





Source: Aerial, LandisCor, 2003. Boundary Approximate. Southern California Edison, 2006 | G:\Projects\384033 CPUC\69678 Kimball Substation\map docs\ISMN\mxd\Project Area.mxd | Last Updated: 12-12-08



## 1.8 PURPOSE AND NEED

According to SCE, the electrical needs of the Cities of Chino and Ontario, as well as the surrounding unincorporated areas of western Riverside County and southwestern San Bernardino County, define the Electrical Needs Area (ENA), which is shown in Figure 1.8-1, Electrical Needs Area. The distribution lines that serve the ENA originate from other SCE-operated substations (e.g., Archibald, Chino, Soquel, and Mira Loma) within the region. The distribution lines from these substations to the ENA range in length from 5 to 7 miles, and can adequately provide electrical service to land primarily used for dairy operations and agriculture. However, the ENA is currently in a transitional phase. An SCE review of general plans and specific plans affecting the ENA indicates that by 2025 there will be approximately 16,000 acres of new residential development, 900 acres of new commercial development, and 1,160 acres of new light-industrial development in addition to the substantial amount of existing residential, commercial, and industrial development in the area.

While the existing distribution lines were able to accommodate the electrical demand of the primarily agricultural ENA, some areas of the ENA, such as Eastvale, has been partially developed and the equipment serving this newly developed area has been exposed to distribution circuit overloads and significant low voltages have been experienced during the peak period on sections at the end of the distribution circuits as a result of long distribution lines between the Edison and Archibald substations. Additionally, future electrical demand within the ENA is expected to increase as indicated above, and the existing SCE distribution system would not be able to handle the load projected by 2025.

In order to accommodate this projected increase in electrical demand, additional transformer capacity at a substation is needed to serve the ENA, the length of the distribution lines between the Edison and Archibald substations needs to be shortened, and improved telecommunications infrastructure is needed to facilitate operating and monitoring new substation and subtransmission line equipment.

The installation Kimball Substation at the proposed location and shortened distribution lines would provide a new source of power to handle the additional load projected within the ENA by 2025 and prevent low voltage conditions during peak period as mentioned above, thereby providing more flexibility to the electrical system as well as reliability during both normal and abnormal conditions.

According to SCE, sections of the ENA are presently experiencing low voltage conditions caused by long distribution lines between the Edison and Archibald Substations. SCE has proposed a plan to correct the existing low voltage conditions for the present rate of electrical demand in the ENA, but as demand continues to grow and the sources of demand move further from the existing substations, SCE has stated it will be difficult to maintain CPUC-mandated voltage levels. Therefore, SCE is proposing a project to be operational on December 31, 2009, to ensure the electrical distribution system has sufficient capacity and capability to provide safe and reliable electric service to customers in the ENA.

In summary, the objectives of the proposed project, as defined by SCE are:

- To serve projected electrical demand requirements in the ENA beginning in 2010;
- To improve electrical system reliability within the ENA;
- To enhance operational flexibility by providing the ability to transfer load between distribution lines and substations within the ENA;
- To prevent existing electrical equipment from overloading during high demand periods;
- To meet projected need while minimizing environmental impact;

- To meet project need in a cost-effective manner; and
- To correct present and projected low voltage conditions experienced by long distribution lines within the ENA by constructing a new substation between the existing Edison and Archibald substations.

## 1.9 DESCRIPTION OF INDIVIDUAL PROJECT COMPONENTS

### 1.9.1 Substation

#### 1.9.1.1 Facilities

The proposed substation would be an unmanned, automated, 56 MVA, 66/12 kV low-profile substation containing a 66 kV switchrack, two 28 MVA 66/12 kV transformers, two 4.8 MVAR 12 kV capacitor banks, and a 12 kV switchrack. The proposed substation would also include underground distribution circuits leaving the substation, a perimeter wall surrounding the substation equipment with a gate to provide access in and out of the substation, and an access road to the substation from the public road (Figure 1.9-1, Site Plan). The substation footprint (area contained within the substation perimeter wall) would be approximately 1.4 acres. The total area of the substation including a buffer area (area outside the substation perimeter wall) would be approximately 1.9 acres. The substation would incorporate low-profile design features, which would limit the height of the electrical equipment to approximately 17 feet above ground level.

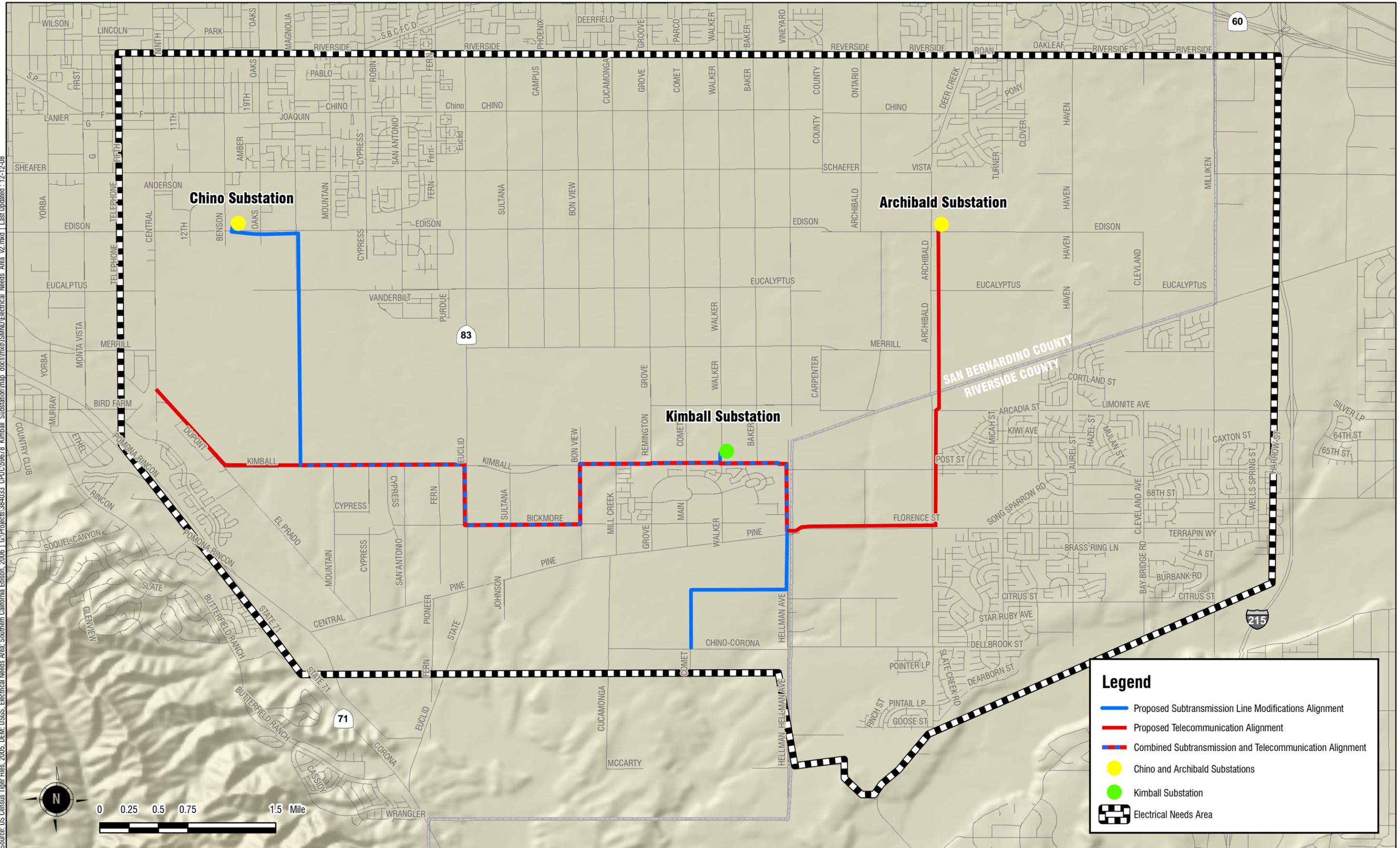
The substation would be connected to the modified subtransmission line along Kimball Avenue via two underground 66 kV subtransmission source lines. Six 12 kV distribution circuits would be installed underneath the substation, and would extend from the substation to Kimball Avenue. These new circuits are electrically connected to the developer's electrical system. At this time, the exact location and routing of these proposed circuits have yet to be determined due to the uncertainty of future electrical demand, specifically, the location of future development. All equipment and structures at the proposed substation would be electrically grounded in accordance with SCE and industry standards. Grounding calculations would be based on soil resistivity measurements.

The proposed substation would have access and maintenance lighting. The access light would be low-intensity and controlled by photo sensors. Maintenance lights would consist of high-pressure sodium lights located in the switchracks, around the transformer banks, and in areas of the substation where maintenance activity may take place. Maintenance lights would be used only when required for maintenance outages or emergency repairs occurring at night. The maintenance lights would be controlled by a manual switch and would normally be in the off position. The lights would be directed downward and shielded to reduce glare outside the facility.

The proposed substation site would not be landscaped immediately following construction. Instead, as the surrounding area develops, a plan for substation landscaping would be prepared and would be consistent with community and city standards to the extent that they are not inconsistent with SCE safety standards.

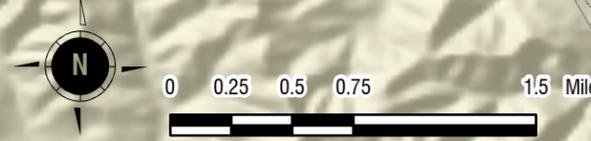
To screen the proposed substation from the public and to secure the facility, the substation would be enclosed on all four sides by an 8-foot high perimeter wall that would be consistent with community standards. A metal access gate approximately 20 feet wide and 8 feet high would be installed along the western perimeter wall facing Flight Street. The perimeter wall and gate would be fitted with barbed wire for increased security. The barbed wire would not be visible from outside the perimeter wall.

Source: US Census Tiger Files, 2005; DEM; USGS; Electrical Needs Area; Southern California Edison, 2006 | G:\Projects\384-033 CPUC\59678 Kimball Substation\map\_docs\mxd\GMND\Electrical Needs Area v2.mxd | Last Updated: 12-12-08



**Legend**

- Proposed Subtransmission Line Modifications Alignment
- Proposed Telecommunication Alignment
- Combined Subtransmission and Telecommunication Alignment
- Chino and Archibald Substations
- Kimball Substation
- Electrical Needs Area

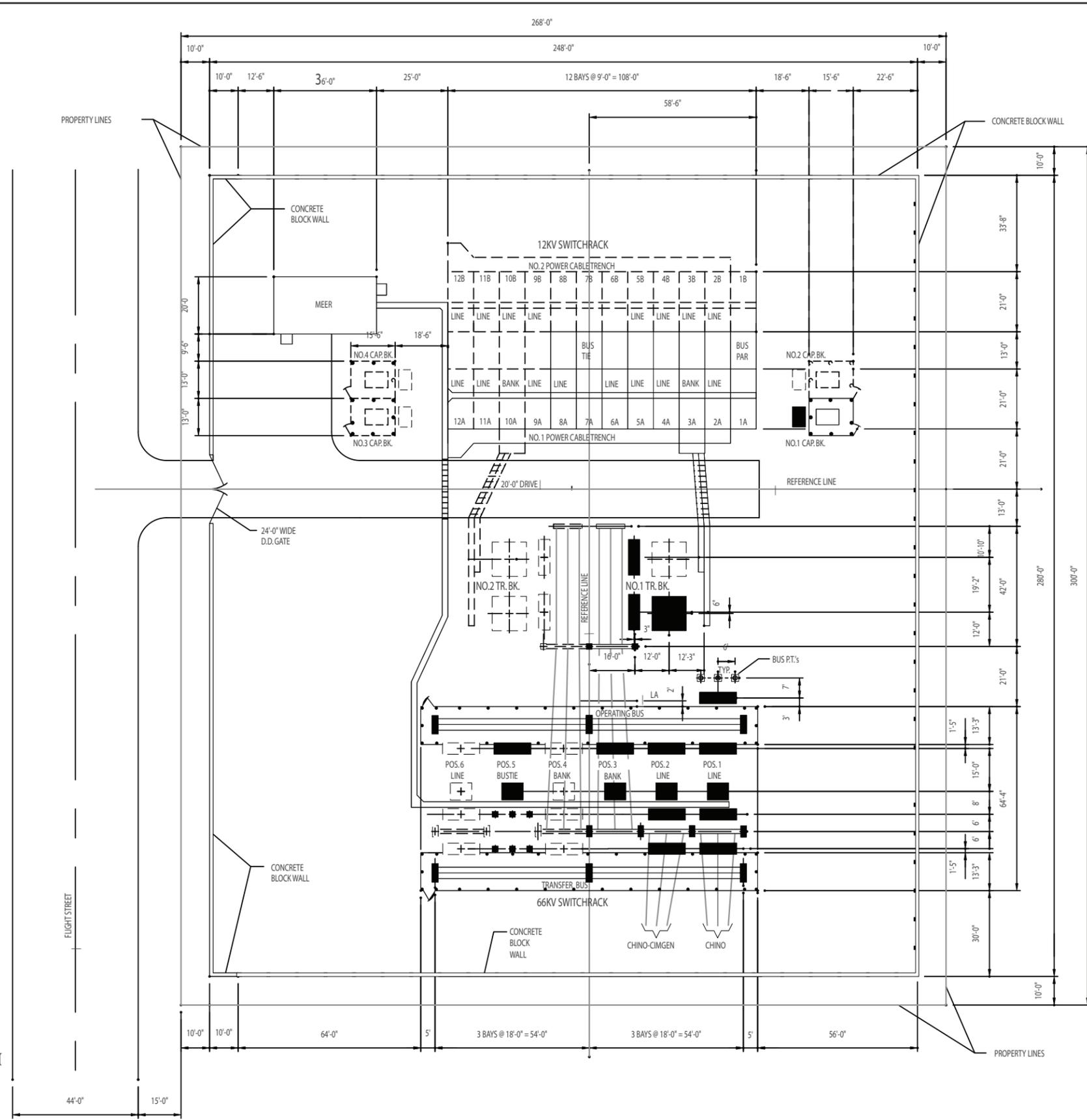


### Electrical Needs Area

FIGURE 1.8-1



Source: Southern California Edison: 2006 | G:\Projects\384033\_CPUC\59678\_Kimball\_Substation\graphics\docs\SMND\SubstationSitePlan.ai | Last Updated: 12-04-2007



0 10 20 Feet



A 16-foot wide asphalt concrete paved driveway would provide access to the site by connecting the substation's metal access gate to Flight Street. The metal access gate would be a locked gate and would provide two-way traffic access to the substation. Substation construction may pre-date the completion of the Flight Street improvement. In this scenario, SCE would construct a temporary 24-foot wide asphalt-paved access road to the substation from Kimball Avenue within the Flight Street right-of-way.

### *1.9.1.2 Substation Site Preparation and Construction*

Approximately nine small walnut trees within the site would be removed and discarded to the full depth of their root system. The mature trees along the northern and western perimeters of the site, outside of the substation footprint, would be protected during construction and would not be removed by this project.

In addition to the tree waste, the top 6 inches of soil (approximately 1,500 cubic yards) would be removed and replaced with an appropriate fill material. All material removed from the site would be tested for the presence of contaminants, transported off-site, and properly disposed of at a certified landfill.

The existing site topography would be incrementally altered by grading. The site would be graded at a one percent slope toward the south. The actual quantity of fill to be imported to the site would be calculated pending final engineering and design plans. It is estimated that approximately 6,000 cubic yards of imported fill would be required to grade the site at a one percent slope. All grading would be conducted in compliance with local ordinances.

Storm water runoff at the proposed substation site would flow from north to south and would be directed towards a 3-foot wide concrete swale located along the southern perimeter wall. The majority of the substation area within the perimeter wall would be covered with a 4-inch thick, pervious, crushed rock surface layer that would provide limited filtration for storm water runoff prior to it reaching the concrete swale. The swale would direct the storm water runoff to a local storm drain system at Flight Street.

In the event that the improvements to Flight Street have not been made prior to construction of the substation, a temporary access road would be graded and installed. The temporary access road would be built based on the site's topography, so that it would be accessible to all construction vehicles and equipment. This temporary access road would be built with gradients and curvatures that would permit heavy equipment usage and maneuvering.

After preparation of the site, a temporary chain-link fence would be erected around the perimeter of the site for the duration of construction. Construction of the foundations and below-ground facilities would be completed, followed by the installation of the above-ground structures and the electrical equipment. Construction of the proposed substation would conclude with the installation of the perimeter wall. Equipment lay down areas for substation construction would be within the substation footprint.

All materials for the proposed substation would be delivered by truck. The transformers would be delivered by heavy transport vehicles and off-loaded on-site by large cranes with support trucks. If necessary, a traffic control service would be used for transformer delivery. The majority of the truck traffic would occur on designated truck routes and major streets, and when possible, would be scheduled for off-peak traffic hours. Some deliveries, such as cement truck deliveries, would occur during peak hours when footing work is being performed.

## 1.9.1.3 Substation Operation and Maintenance

The proposed substation would be unmanned and the electrical equipment within the substation would be monitored and controlled remotely by a power management system from the Mira Loma Substation. Due to the remote operation of the substation, SCE personnel would generally visit for electrical switching and routine maintenance. Routine maintenance would include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for service continuity and preventive maintenance. SCE personnel would generally visit the substation two to three times per week.

## 1.9.2 Subtransmission Line Modifications

### 1.9.2.1 Facilities

The existing Chino-Corona-Pedley 66 kV subtransmission line would be the source line for the proposed substation. In order to connect the proposed substation to the existing Chino-Corona-Pedley line (and close the loop), two new 66 kV line segments, approximately 340 feet each, would be constructed underground, from the intersection of Kimball Avenue and Flight Street to the proposed substation. As a result of the loop-in, two new 66 kV subtransmission lines would be formed: the Chino-Kimball 66 kV subtransmission line and the Chino-Cimgen-Kimball 66 kV subtransmission line, as shown in Figure 1.9-2, Existing and Proposed Subtransmission Line Arrangements. To accomplish the loop-in, the following modifications to existing 66 kV subtransmission lines would be necessary:

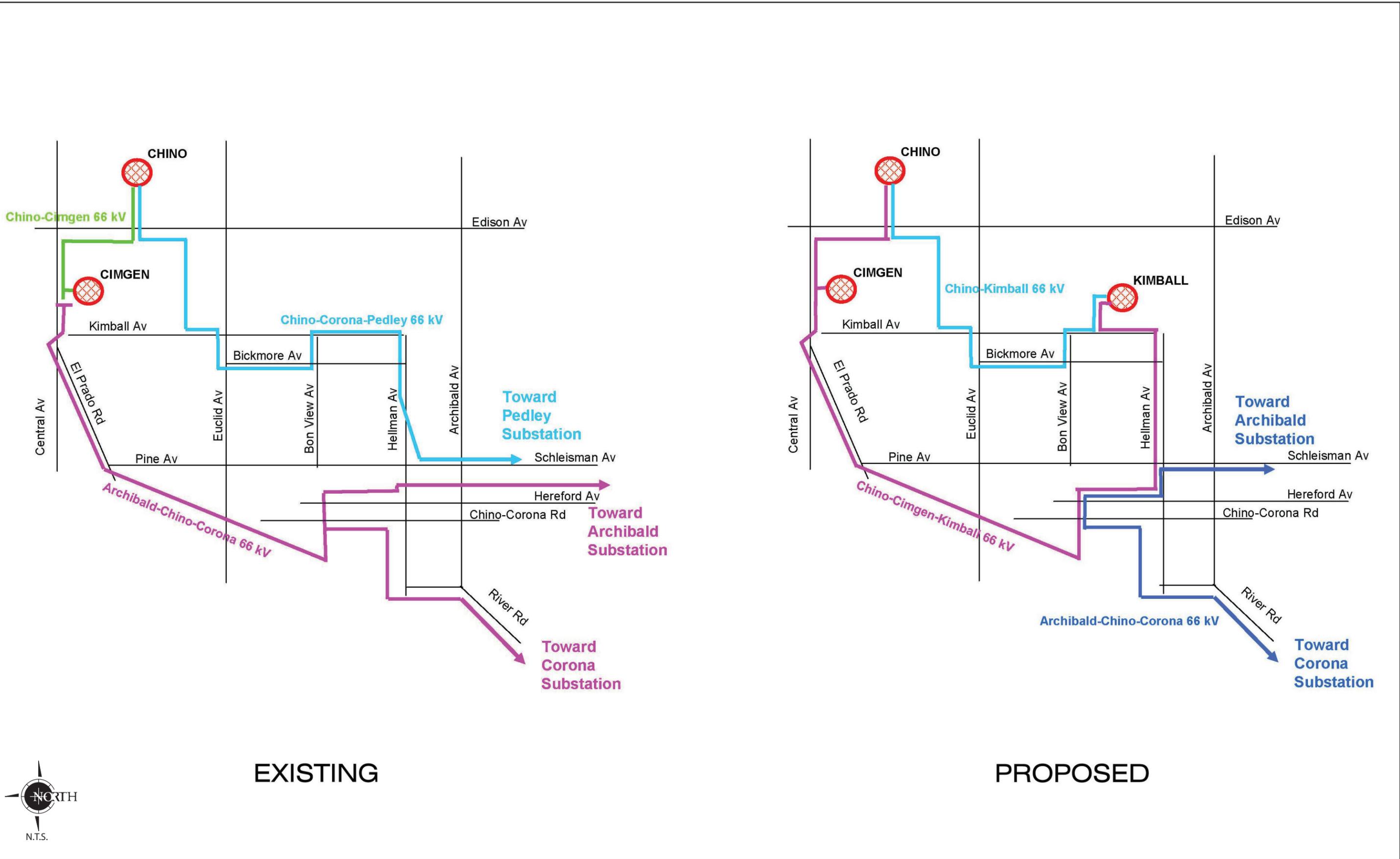
- Modification of approximately 6.7 miles of the Chino-Corona-Pedley 66 kV subtransmission line by replacing the existing wood poles with LWS poles and replacing the existing conductor<sup>1</sup> with 954-one thousand circular mils (kcmil) stranded aluminum conductor (SAC). The phase would also include the modification of an additional 1.1 mile of the line by replacing the conductor with 954 SAC.
- Construction of two new 66 kV underground line segments using 3000 kcmil copper cable to extend the existing Chino-Corona-Pedley 66 kV subtransmission line approximately 340 feet into the proposed Kimball Substation.
- Construction of an approximately 0.4-mile long 66 kV subtransmission line segment using LWS poles and 954 SAC.
- Addition of a second 66 kV subtransmission line approximately 0.9-mile long to existing structures using 954 SAC.

The locations of the subtransmission line modifications are shown in Figure 1.9-3, Proposed Subtransmission Line Modifications. Specific modifications to be made to the subtransmission line are included in Table 1.9-1.

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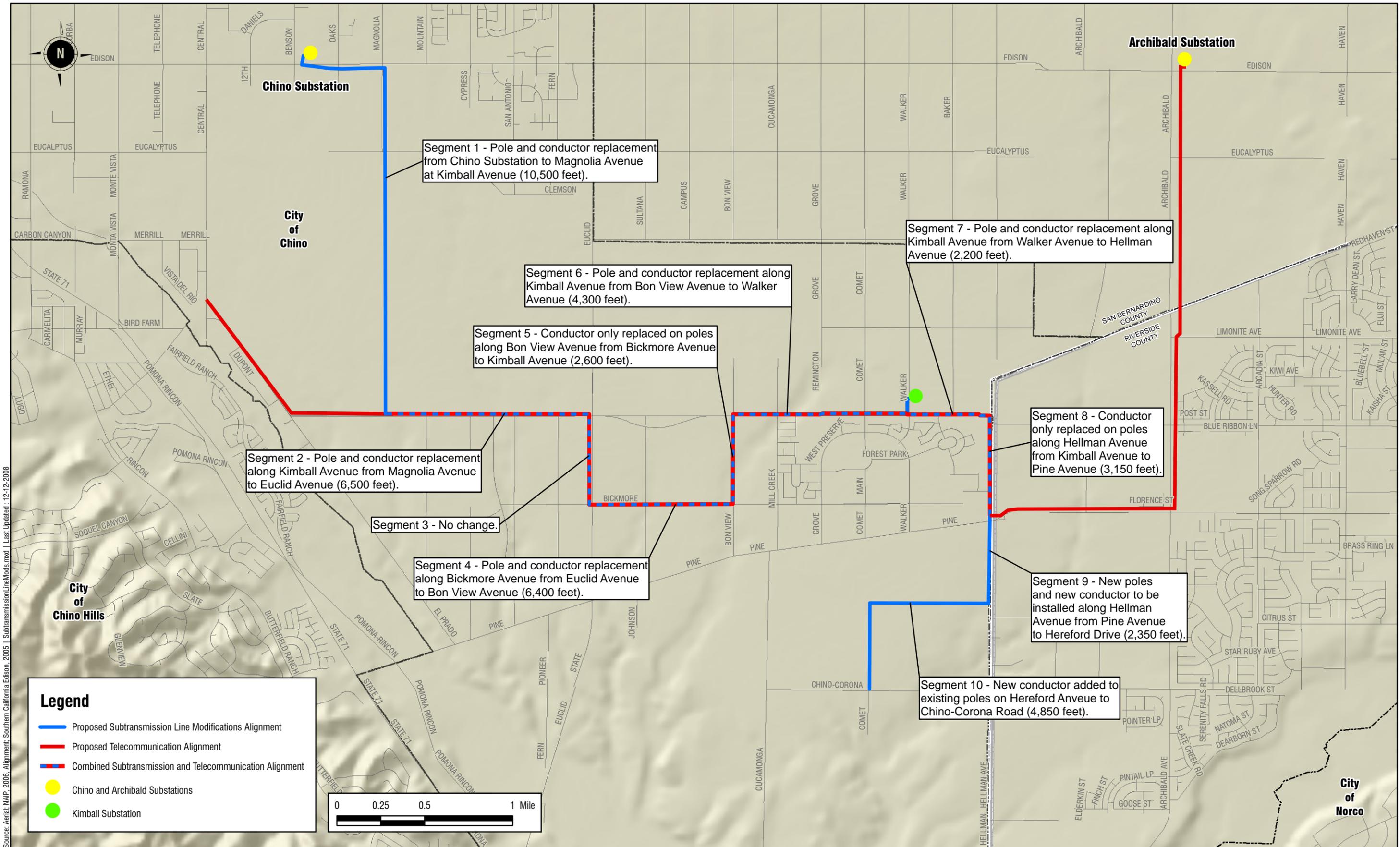
<sup>1</sup> The term ‘conductor’ refers to the path through which a current of electricity flows, in this case, a wire.

Source: Southern California Edison, 2006 | G:\Projects\384033\_CPUC\5 9678\_Kimball\_Substation\graphics\docs\SMND\LineArrangements.a | Last Updated: 03-06-2008



Existing and Proposed Subtransmission Line Arrangements  
FIGURE 1.9-2





Source: Aerial; MAP, 2006. Alignment: Southern California Edison, 2005 | SubtransmissionLineModis.mxd | Last Updated: 12-12-2008



**Table 1.9-1. Proposed Subtransmission Line Modifications**

Segment	Modification(s)
1	Approximately 10,500 feet of conductor and 56 poles would be replaced along this segment.
2	Approximately 6,500 feet of conductor and 30 poles would be replaced along this segment.
3	No modifications.
4	Approximately 6,400 feet of conductor and 10 poles would be replaced along this segment.
5	Approximately 2,600 feet of conductor and 10 poles would be replaced along this segment.
6	Approximately 4,300 feet of conductor and 30 poles would be replaced along this segment. At the intersection of Flight Street and Kimball Avenue a tubular steel pole (TSP) riser would be installed to transition the overhead lines to underground cables. Two new 66 kV underground lines would be extended approximately 600 feet from the TSP riser into proposed substation.
7	Approximately 2,200 feet of conductor and 15 poles would be replaced along this segment.
8	Approximately 3,100 feet of conductor would be installed on poles that will be replaced prior to construction of the proposed project.
9	Approximately 2,300 feet of new conductor and nine new poles would be installed.
10	Approximately 4,800 feet of new conductor would be installed on existing structures.

In summary, the subtransmission modifications would result in a total of 160 new lightweight steel (LWS) poles and 9.1 miles of new 954 kcmil stranded aluminum conductor. One tubular steel pole (TSP)<sup>2</sup> riser would be installed at the intersection of Flight Street and Kimball Avenue to connect the overhead conductor to underground cables. In areas where there are existing SCE distribution lines and/or third-party owned telecommunication and cable television lines attached to the existing wood poles, those lines would either be buried in public streets or transferred to the new LWS poles at approximately the same height above ground level as they currently exist. The new LWS poles would be approximately 10 feet taller than the existing wood poles (Figure 1.9-4, Typical Subtransmission Line Poles).

**1.9.2.2 Subtransmission Line Construction**

The following sections outline the construction activities for the overhead and underground 66 kV subtransmission line modifications associated with the proposed project.

**Overhead Subtransmission Line Construction**

The construction equipment used for installing and removing poles and for pulling an overhead conductor would be positioned on existing streets directly adjacent to the new and existing lines.

**Light Weight Steel Pole Installation.** Installation of LWS poles would require excavation to approximately nine feet below ground surface, and the poles would be set directly in native soil. All construction equipment for LWS pole installation (including delivery by truck) would be staged on public street rights-of-way and would require the use of a traffic control service. All lane closures would be conducted in accordance with local ordinances. No closures are needed on Euclid Avenue (State Route 83). All needed lane closures will be within the City of Chino, and required permits will be secured prior to any closure.

<sup>2</sup> A TSP riser is the structure used to transition between overhead conductors to underground cables.

**Wood Pole Removal.** The existing wood poles would be completely removed (including the portion below ground surface) and the hole would be backfilled using imported fill in combination with fill that may be available from the excavation of the existing poles. The removed poles would be returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a certified municipal landfill.

**TSP Riser Installation.** A TSP riser footing typically requires a borehole 8 to 9 feet in diameter and 20 to 40 feet deep. Reinforcing steel and mounting bolts would be positioned in the excavated hole and concrete would be placed around the structures to set the footing. After the footing has set, the TSP riser would be assembled on site, erected and bolted to the foundation.

**Conductor Installation.** Pole installation would be followed by installing the overhead conductors. This would include tensioning and clipping in the conductor. Conductor pulling would require a 50- to 100-foot by 10-foot area at each end of the pull, one for feeding out conductor and one for pulling. Typically, pulling sites are located every 6,500 feet. All conductor installation would be in accordance with SCE specifications.

### **Underground Subtransmission Line Construction**

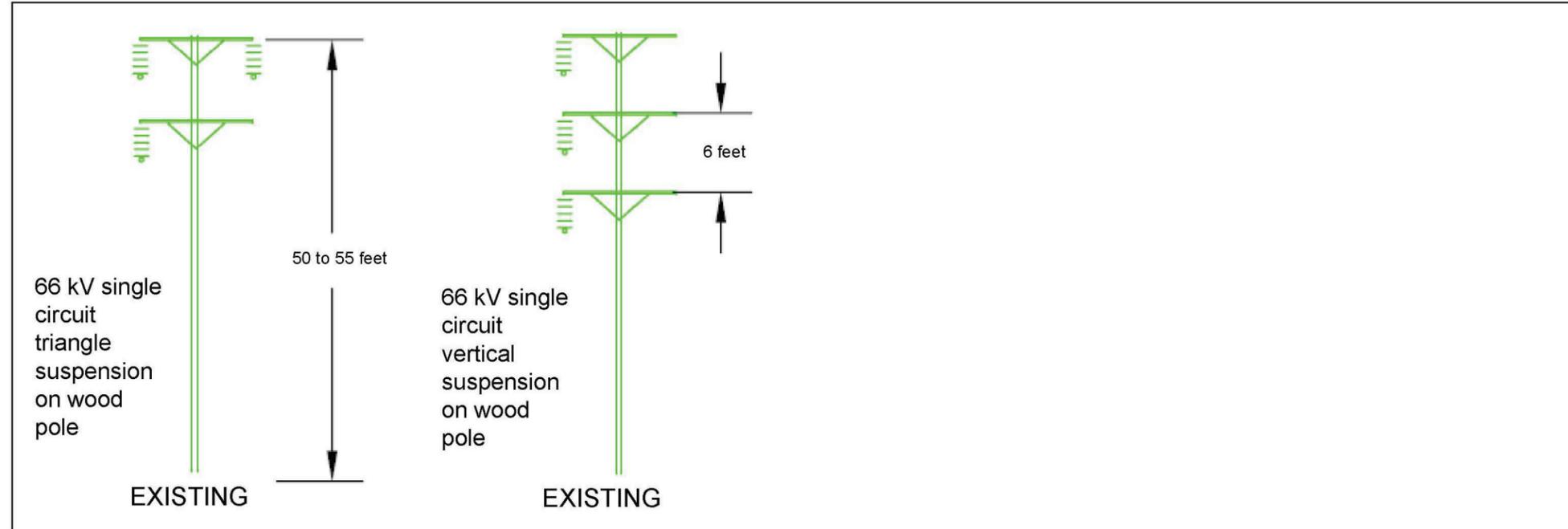
This section describes the installation of the underground subtransmission line segments that would extend the existing Chino-Corona-Pedley 66 kV subtransmission line to the proposed substation. Two new line segments consisting of 3000 kcmil copper cable would be placed in an approximately 340-foot long concrete encased PVC duct bank that would be installed between the substation and the TSP riser.

**Digging and Trenching.** A 24-inch wide by 5-foot deep trench would be required to place the conduits underground. Trenching would be performed with a backhoe and other machinery specifically designed for this purpose. Soils would be tested for the presence of contaminants, and where appropriate, either used at the substation site, transported off-site for use as clean fill, or disposed of at an appropriate landfill. If the trenching requires the removal of pavement, it would be disposed of at an appropriate facility. The trench would be backfilled with two-sack slurry. As with all SCE underground construction, Underground Service Alert would be contacted at least 48 hours prior to excavation in order to minimize impacts to other utilities.

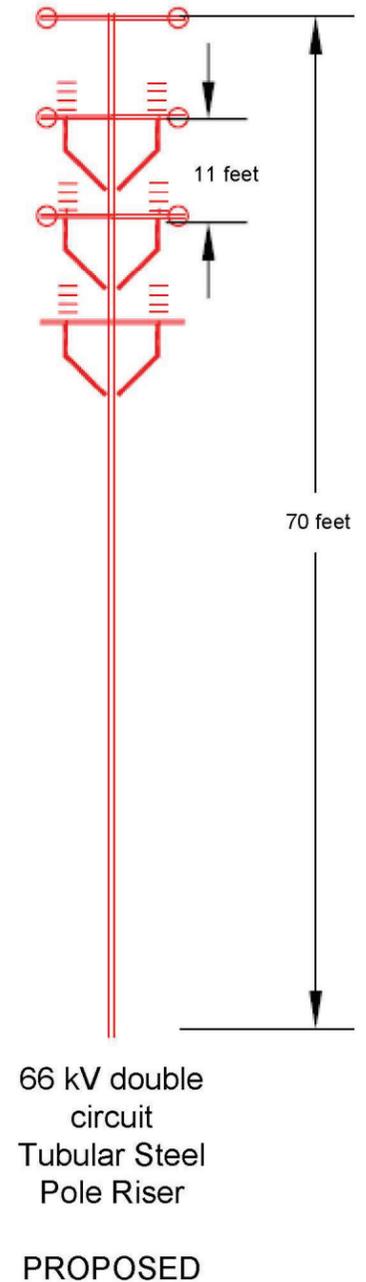
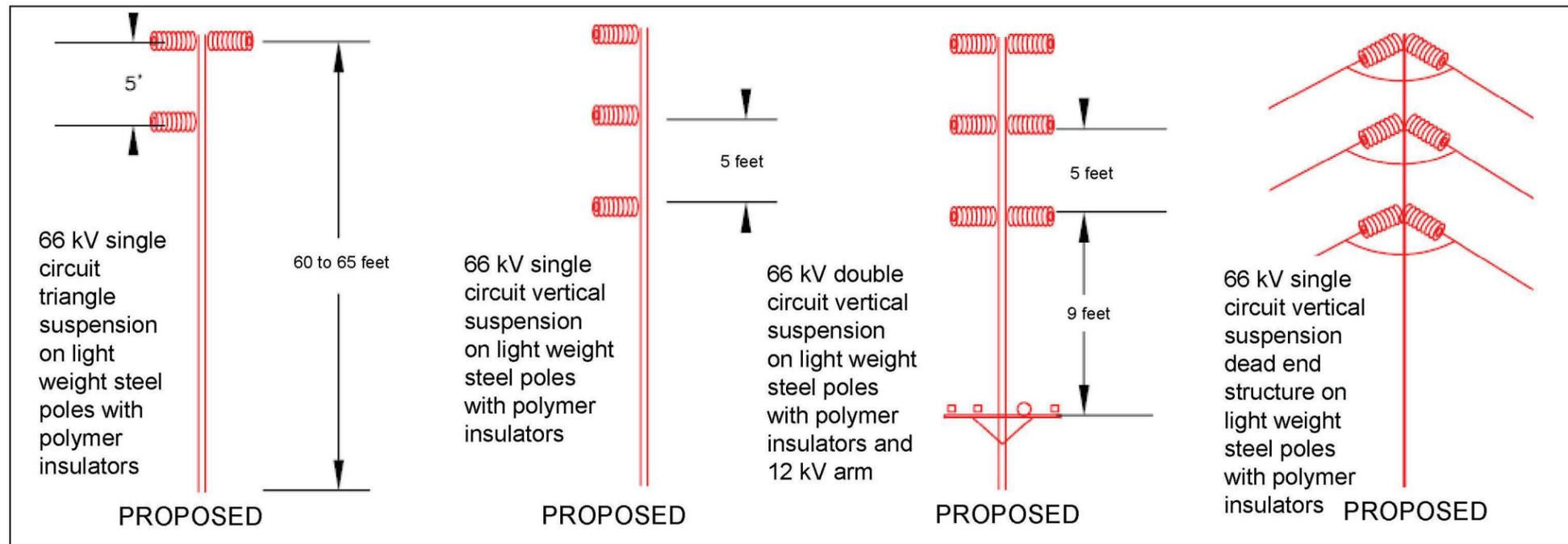
**Vault Installation.** Vaults are below grade (i.e., below ground surface) concrete enclosures where the duct banks terminate. The vaults are constructed specifically for use in roadways and can accommodate vehicle loads without damage. One vault would be located inside the proposed substation and one vault would be located north of the TSP riser along Flight Street. The top of the vaults would be installed approximately 3 feet below surface and would house equipment and splices for underground lines.

**Duct Bank Installation.** Five-inch diameter polyvinyl chloride (PVC) conduits are configured and encased in approximately 3 inches of five-sack hardened concrete at a minimum depth of 36 inches. This is known as a duct bank. One duct bank would be installed from the vault within the proposed substation to the vault north of the TSP riser along Flight Street. Thereafter, the duct bank extends from the vault to the TSP riser. Typical 66 kV subtransmission duct bank installations would accommodate six cables and one 4/0 copper ground wire. The concrete encasement provides protection from accidental third party damage and improves heat dissipation.

The existing wood poles are approximately 50 to 55 feet above grade. Porcelain insulators are attached to 10 foot long wood crossarms that are mounted approximately 6 feet apart. 12 kV arms are mounted approximately 9 feet below the lowest subtransmission conductor. Communications circuits (if present) are attached directly to the pole at 10 feet below the 12 kV arm. Poles are approximately 24 inches diameter at the base and approximately 12 to 16 inches at the top.



The wood poles would be replaced with light weight steel poles and polymer insulators. 12 kV arms would be mounted 9 feet below the lowest subtransmission conductor. Communications circuits (if present) would be attached directly to the pole at 10 feet below the 12 kV arm. Poles are approximately 24 inches diameter at the base and approximately 12 to 16 inches at the top.



Typical Subtransmission Line Poles  
FIGURE 1.9-4



**Backfill Placement.** Once the concrete has hardened, two-sack concrete slurry would be used to backfill the trench to the finished grade at a ninety percent rate of compaction. If the trench is installed in a paved roadway, the excavation would be repaved to match the existing roadway per local ordinance specifications.

**Cable Pulling.** Upon completion of all substructures including the TSP riser, the 66 kV underground subtransmission line segments would be installed by pulling underground cables from a reel positioned at the vault within the proposed substation to the vault north of the TSP riser along Flight Street. The cable would then be pulled from the vault to the TSP riser. Another set of underground cables would then be pulled from the substation to the vault outside the substation, and the ends of each cable would be spliced together.

### **1.9.2.3 Subtransmission Line Operation and Maintenance**

SCE regularly inspects subtransmission lines, vaults, and associated components. The inspections may lead to routine and preventative maintenance. There may also be emergency repair and maintenance performed for service continuity. No additional SCE personnel above normal staffing levels would be required to operate or maintain these subtransmission lines.

## **1.9.3 Telecommunication System**

### **1.9.3.1 Description**

The proposed project includes the construction of communication infrastructure for the operating and monitoring of the substation and subtransmission line equipment. The new infrastructure would connect the proposed Kimball Substation to the existing Mira Loma Substation via the existing Archibald and Chino Substations (Figure 1.9-5, Proposed Telecommunication Improvements). The following sections describe the telecommunication improvements required for the proposed project.

#### **Telecommunication Improvements**

Constructing the proposed telecommunications system improvements for the proposed project would require the installation of fiber-optic cable between the proposed substation and the Archibald Substation, and between the proposed substation and the existing fiber-optic cable located on Central Avenue. A 48-strand fiber-optic cable would be used for both installations. The fiber-optic cable installation route would utilize both overhead and underground facilities. There would be new underground ductbanks installed between the Substation site and Kimball Avenue and along Euclid Avenue between Brickmore Avenue and Kimball Avenue. The rest of the telecommunication route would be in existing conduit or on poles (either on existing poles or poles installed as part of the project).

In addition, new telecommunications equipment would be installed at the proposed substation. An equipment rack installed at the proposed substation Mechanical Electrical Equipment Room (MEER) would house the new telecommunications equipment. The proposed substation would contain conduits that connect to off-site fiber-optic cables. Telecommunications equipment upgrades would also occur at the Cimgen, Chino, Ontario, Firehouse, Milliken, Mira Loma, and Archibald Substations to facilitate the new interconnections.

## 1.9.3.2 Telecommunications Construction

**Overhead Cable Construction.** The overhead telecommunications cable would be attached to new LWS poles that would be installed during the proposed subtransmission line modification, and existing wood poles in those areas where the proposed telecommunication line deviates from the proposed subtransmission line modifications (e.g., where the telecommunication line turns east from Hellman Avenue into Riverside County and then north into the City of Ontario). A truck with a cable reel would be set up at one end of the section to be pulled, and a truck with a winch would be set up at the other end. The cable would be pulled onto the poles with pull rope. The cable would then be permanently secured to the poles. The sections typically vary between 8,000 and 12,000 feet in length. The fiber strands would be spliced between each section.

**Underground Construction.** The underground telecommunication cable would be installed in new underground trenches at the proposed substation and the existing Archibald Substation, as well as in a new borehole that would be installed along a portion of Archibald Avenue where it would cross under the 500 kV transmission line corridor. At the Archibald Substation, a new underground vault and conduits would be installed within the substation site to bring the fiber-optic cable from the substation to the nearest subtransmission line pole.

At the proposed substation and the existing Archibald Substation, a trench 18 inches wide and 36 inches deep would be excavated with a backhoe. A 5-inch PVC conduit would be placed in the trench and covered with a layer of slurry, and paved. A vault would be installed at the beginning and the end of each section of trench.

Where the telecommunications route crosses the 500 kV corridor, the underground conduits would be installed using a horizontal boring method. A 7-foot by 10-foot hole would be excavated to a depth of 7 feet at each side of the corridor, and the boring machine would be placed inside one hole and directed to the second. The diameter of the boring would be approximately 7 inches. An underground conduit approximately 250 feet long would be installed within the boring to house the telecommunication cable across the corridor. A vault would be installed at both ends of the boring to house the cable splice.

## 1.9.3.3 Telecommunications Operation and Maintenance

The telecommunications system would require periodic routine maintenance as well as emergency procedures for service continuity. Routine maintenance would include equipment testing, equipment monitoring, and repair. No new maintenance roads are anticipated at this time. No additional SCE personnel beyond normal staffing levels would be required to operate or maintain the telecommunication system for the substation.

## 1.9.4 Project Design Considerations/ Applicant Proposed Measures (APMs)

The proposed project incorporates several design measures which would minimize project impacts. Specifically, design measures are provided which would minimize potential aesthetics, air quality, geology and soils, hazards and hazardous materials, transportation and traffic, and noise impacts (see Table 1.9-2).





**Table 1.9-2. Project Design Considerations/Applicant Proposed Measures (APMs)**

<b>Aesthetics</b>
<u>Structure Height</u> APM Aes1: Structures associated with the proposed substation would incorporate low profile design features that would limit the height of the electrical equipment to approximately 17 feet.
<b>Air Quality</b>
<u>NO<sub>x</sub> and CO Emissions</u> APM Air1: Idling time will be limited to a maximum of five minutes when construction equipment is not in use per Section 2449(d)(3) of Title 13, Article 4.8, Chapter 9 of the California Code of Regulations (CCR).
<u>Fugitive Dust</u> APM Air2: SCE will prepare and implement specific fugitive dust control measures pursuant to SCAQMD Rule 403.
<u>Odor</u> APM Air3: SCE will reduce odors associated with diesel exhaust by the use of either low-sulfur or ultra-low-sulfur fuel.
<b>Geology and Soils</b>
APM Geo1: The electrical equipment associated with the proposed substation would be constructed in accordance with the Institute of Electrical and Electronics Engineers (IEEE) Recommended Practices for Seismic Design of Substations.
<b>Hazards and Hazardous Materials</b>
APM Haz1: Hazardous or flammable materials used during construction would consist primarily of vehicle fuels (gasoline and diesel), oil, grease, and other fluids (hydraulic fluid, antifreeze, and transmission fluid) associated with construction equipment. Liquid concrete would also be used during construction. To avoid the inadvertent release of these materials (and to ensure proper response protocols), SCE would be required to implement environmental training for its field personnel.  APM Haz2: During operation, the project subtransmission lines may pose a fire hazard if vegetation or other obstructions come in contact with energized conductor. The proposed project would be constructed and maintained in a manner consistent with CPUC G.O. 95 and CPUC G.O. 165. Consistent with these and other applicable state and federal laws, SCE would maintain an area of cleared brush around the conductor, minimizing the potential for fire. Further, the applicant would work with developers along this route to insure that trees in proximity to the proposed line will not exceed 15 feet in height. The project site is not located in a designated wildland fire hazard zone. To prevent heat or sparks from vehicles or construction equipment from igniting dry vegetation and causing a fire, SCE will be responsible for clearing work areas of flammable vegetation to reduce the potential for fires and to direct workers to park vehicles away from dry vegetation. Incorporation of these construction site best management practices (BMPs) would prevent the proposed project from exposing people or structures to a significant risk of fire.
<b>Noise</b>
APM Noise 1: SCE will comply with noise standards established by local municipalities, including regulations limiting construction hours. If construction must take place outside of normal business hours, SCE will apply for a variance with the appropriate jurisdiction to allow construction noise levels to exceed their established thresholds. SCE will comply with the terms of any variance that may be granted.
<b>Traffic/Transportation</b>
APM Traffic1: In the event that improvements to Flight Street have not been made prior to construction of the substation, a temporary access road will be graded and installed. The temporary access road would be built based on the site's topography so that it would be accessible to all construction vehicles and equipment. This temporary access road would be built with gradients and curvatures that would permit heavy equipment usage and maneuvering.

### 1.10 PROJECT SCHEDULE AND PERSONNEL REQUIREMENTS

Construction duration for the substation, subtransmission lines, and telecommunication upgrades is estimated to be up to 12 months. According to SCE estimates, construction schedules for the individual components of the proposed project include: 287 days for the proposed substation, 152 days for the subtransmission line modification, and 66 days for the telecommunication improvements. In order to complete construction in 12 months, individual project components would be installed and/or constructed in simultaneous phases.

Construction is scheduled to begin in May 2009, with a projected completion date for the substation and subtransmission line of April 2010. Approximately two months would be required to energize and test subtransmission line components once construction has been completed. The projected operating date for the proposed project is June 2010.

Construction of the proposed project would require up to a total of 15 crew members during periods of peak construction activity.

2.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

2.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>I. AESTHETICS:</b> Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.1.1 Setting

The proposed project is located within the cities of Chino and Ontario, and adjacent unincorporated areas of western Riverside County and southwestern San Bernardino County. Specifically, the proposed substation site is located in the City of Chino, on Flight Street approximately 340 feet north of Kimball Avenue. The proposed modifications to the Chino-Corona-Pedley 66 kV subtransmission line would take place entirely within the boundaries of the City of Chino, while the installation of telecommunication infrastructure would extend from the City of Chino to the east into an unincorporated area of Riverside County and the City of Ontario to the east and north, respectively. Both the proposed modifications to the subtransmission line and the telecommunication improvements would take place along subtransmission lines within existing SCE easements that already contain transmission poles and conductor. Along the majority of this alignment, wood poles would be replaced with LWS poles for all segments of the alignment with the exception of the following four segments:

- Bon View Avenue between Kimball and Brickmore Avenue;
- Bon View Avenue between Brickmore and Kimball Avenue;
- Hellman Avenue between Kimball and Pine Avenue; and
- Hereford Avenue between Hellman Avenue and Chino-Corona Road<sup>3</sup>.

New conductors would be installed along all segments of the alignment with the exception of Bon View Avenue between Kimball and Brickmore Avenue.

The visual character of the project area can be described as predominantly agricultural with some industrial and newer residential influences. Specifically, industrial and commercial areas surround Chino Substation to the north, east and west. Land uses surrounding the proposed substation site include

<sup>3</sup> LWS poles already exist along this segment of the subtransmission alignment. Modifications to this segment of the alignment include the installation of new conductor only.

agricultural (primarily dairy) and recent residential development. A portion of the alignment of the subtransmission line modifications passes through agricultural lands within the western boundaries of the Chino State Prison and adjacent to recently constructed industrial and commercial developments east of Euclid Avenue. To the west of Euclid Avenue, the alignment runs adjacent to agricultural lands, primarily older, smaller dairy farms, before passing through the newer residential areas of “The Preserve,” a large master planned community currently under construction. Chino Airport, with a variety of associated industrial areas, is located to the north. Land parcels are connected by primarily unpaved and single lane rural-type roads, although major arterial roads exist throughout the project area. Major arterial roads in the project area include Kimball, Edison, and Euclid Avenues. Additionally, a utility corridor containing two 500 kV and two 220 kV transmission lines bisects the southern portion of the project site in a northeasterly to southwesterly direction.

As well as expanding industrial and commercial areas within its boundaries, substantial recent residential development has occurred within southern and eastern portions of Chino. While the agricultural character of the area remains evident, primarily in southern portions of the city, the transition from primarily agricultural to residential and industrial uses is visibly underway within the project area. As proposed, the project would accommodate this planned growth by supplying electricity to this rapidly urbanizing area.

### 2.1.2 Environmental Impacts and Mitigation Measures

**a. Would the project have a substantial adverse effect on a scenic vista? LESS THAN SIGNIFICANT IMPACT**

According to the City of Chino General Plan, there are no scenic vistas in proximity to the project area given the low lying topography of the surrounding areas. A review of the City of Ontario and counties of Riverside and San Bernardino General Plans also concluded that there are no scenic vistas in or around the project area.

The proposed substation is designed as a low profile facility and both the proposed modifications to the subtransmission line and the telecommunication improvements would take place along a subtransmission line within existing SCE easements that already contain wood power poles and conductor. Therefore, the project does not propose land uses or structures that could have a substantial adverse effect on a potential scenic vista. A less than significant impact has been identified for this issue area.

**b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? LESS THAN SIGNIFICANT IMPACT**

According to the California Department of Transportation (Caltrans), the nearest state scenic highways to the project area are State Routes (SR) 91 and 71, approximately nine miles and 0.5 miles to the southwest, respectively (2007). Given the sufficient distance between the project site and SR 91, the project is not anticipated to impact scenic resources within SR 91. Further, the proposed project is generally screened from views along SR 71 by low lying hills along the east side of highway (Michael Brandman Associates 2003). Therefore, the proposed project would not substantially degrade scenic views within SR 71.

Euclid Avenue (SR 83), which bisects the project site at Kimball Avenue, is designated a scenic highway by the County of San Bernardino and a scenic corridor by the City of Ontario. However, because Euclid Avenue and the proposed substation site are at approximately the same elevation, views of the proposed substation would be limited from the scenic highway/corridor. In addition, the

telecommunication improvements to be made within the City of Ontario at the Archibald Substation would take place either on existing power poles or within the substation site. These improvements would therefore not represent a new, significant impact to the Euclid Corridor.

No historical structures are known to exist on the proposed substation site or along the 66 kV subtransmission and telecommunication alignments; therefore impacts to historical structures would not occur. The project site is relatively flat and contains no rock outcroppings. Approximately nine small walnut trees would be removed and discarded to construct the proposed substation; however, these trees do not represent a significant scenic resource given the prevailing visual character of the surrounding area. No trees would be removed during the subtransmission modifications or telecommunication improvements. Therefore, a less than significant impact has been identified for this issue area.

**c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

### **Substation**

As proposed, the substation would be constructed on a flat, 2-acre site. The site is bound to the north and west by a row of mature tamarisk trees and consists of non-native, weedy vegetation, a grove of walnut trees, and scattered trash and debris. Surrounding land uses include Chino Airport to the west, Kimball Avenue and a large residential development to the south, and dairy facilities to the north and east. A single-family residence is located immediately south of the proposed substation site. The residence has been scheduled for removal and the site will be developed as part of a light industrial or commercial business park.

Figures 2.1-1 depicts a simulated view of the proposed substation. Structures associated with the substation would incorporate low profile design features that would limit the height of the electrical equipment to approximately 17 feet. Mitigation Measure AES1 would require the substation to be screened behind an 8-foot high perimeter wall with exterior drought tolerant landscaping. These measures would largely screen the substation from casual view. Future land uses, which include a proposed business park, would further screen the substation from view from residential areas to the south, and would prevent the facility from substantially degrading the existing visual character or quality of the site and its surroundings. A less than significant impact with mitigation incorporated has been identified for this issue area.

### **Subtransmission and Telecommunication Alignments**

The subtransmission line modifications and telecommunication improvements would take place entirely on undeveloped land, or land within existing and/or newly acquired SCE utility easements, public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. As outlined above, the proposed subtransmission line modifications would take place entirely within existing SCE easements that already contain transmission poles and conductor. Along the majority of this alignment, new LWS poles and conductor would be installed.

Figures 2.1-2 and 2.1-3 depict simulated views of the proposed subtransmission line modifications along Kimball Avenue from a driver's and pedestrian's perspective, respectively. Figure 2.1-4 illustrates the view of the proposed subtransmission line modifications along Edison Avenue with the proposed 66 kV double circuit LWS poles with 12kV arms. The LWS poles shown in these visual simulations would be

approximately five to ten feet taller than the existing wooden power poles. Given that area views are already impacted by existing power poles and electrical lines, the visual character of the project area would not be further degraded by the incremental increase in pole height and installation of new lines associated with the subtransmission line modifications.

Fiber-optics cable would be installed along all segments of the alignment of the subtransmission line modifications as part of the telecommunication improvements. The addition of a fiber-optics cable to poles that already contain electrical lines would not represent a significant degradation of the existing visual character of the project area. Since the telecommunication improvements at the Kimball and Archibald Substations would take place within the substations' footprints, no new impacts to the visual character of the project area are anticipated. A less than significant impact has been identified for this issue area.

### **Mitigation**

**MM Aes1:** The substation shall be screened behind an 8-foot high perimeter wall with exterior drought tolerant landscaping.

**d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

The proposed substation would have access and maintenance lighting during operation. Access lighting would be low-intensity and controlled by photo sensors. Maintenance lighting would consist of high-pressure sodium lights located in the switchracks, around the transformer banks, and in areas of the substation where maintenance activity may take place. However, maintenance lighting would only be used during maintenance outages or emergency repairs occurring at night. Maintenance lights would be controlled by a manual switch with a default in the off position. Furthermore, the lights would be directed downward and shielded to reduce glare outside the facility. Given that the use of access and maintenance lighting would be temporary and infrequent, the proposed substation would not be anticipated to create a new source of substantial light or glare which would adversely affect day or nighttime view in the project area.

Construction activities would not require construction lighting because construction is not anticipated to occur at night. A less than significant impact has been identified for this issue area.

### **Subtransmission and Telecommunication Alignments**

As previously discussed, construction activities are not anticipated to occur at night, and, therefore, would not require construction lighting. As proposed, the subtransmission line modifications and telecommunication improvements would not include permanent lighting features. Therefore, these project components would not create a new source of substantial light or glare. A less than significant impact has been identified for this issue area.



Existing View from North of Kimball Avenue on Walker Avenue looking northeast



Proposed Kimball Substation with Landscape Concept (Roadway not to Scale)

Source: HDR, 2007 | G:\Projects\384033\_CPUC\59678\_Kimball\_Substation\graphics\docs\IS\_MND\VisualSim\_4.ai | Last Updated: 03-04-2009

## Simulation of Proposed Substation

FIGURE 2.1-1



ONE COMPANY | *Many Solutions*™





Existing View From Kimball Avenue looking east



Proposed View From Kimball Avenue looking east

Source: HDR; 2007 | G:\Projects\384033\_CPUC\59678\_Kimball\_Substation\graphics\docs\SMND\VisualSim\_1.ai | Last Updated: 03-04-09

## Simulation of Subtransmission Line Along Kimball Avenue

FIGURE 2.1-2



ONE COMPANY | *Many Solutions*™





Existing View From Kimball Avenue looking east-northeast



Proposed View From Kimball Avenue looking east-northeast

Source: HDR, 2007 | G:\Projects\384033\_CPUC\59678\_Kimball\_Substation\graphics\docs\IS\_MND\VisualSim\_2.ai | Last Updated: 03-04-2009

## Simulation of Subtransmission Line Along Kimball Avenue

FIGURE 2.1-3



ONE COMPANY | *Many Solutions*™





Existing View from Edison Avenue looking east



Proposed View from Edison Avenue looking east

Source: HDR; 2007 | G:\Projects\384033\_CPUC\59678\_Kimball\_Substation\graphics\docs\IS\_MND\VisualSim\_3.ai | Last Updated : 03-04-2009

## Simulation of Subtransmission Line Along Edison Avenue

FIGURE 2.1-4



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2.2 AGRICULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.2.1 Setting

The proposed project is located in a region that has historically been a center for dairy farming and other agricultural activities. While the agricultural character of the area remains evident, primarily in southern portions of the City of Chino, the transition from primarily agricultural to residential and industrial uses is visibly underway within the project area. As previously discussed, land uses that surround the proposed project are varied, ranging from industrial and agricultural (crops and dairy), to residential and recreational. Specifically, a portion of the alignment of the subtransmission line modifications passes through agricultural lands within the western boundaries of the Chino State Prison. To the west of Euclid Avenue, the alignment is adjacent to agricultural lands and primarily older, smaller dairy farms. Current uses surrounding the proposed substation site include agricultural (primarily dairy) and residential uses.

The California Department of Conservation (CDC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to assess the location, quantity, and quality of California’s agricultural resources. FMMP statistics are used to analyze impacts to “Prime Farmland”, “Farmland of Statewide Importance”, and “Unique Farmland” resulting from development. As defined by U.S. Department of Agriculture, Prime Farmland is defined as land that has the best combination of physical and chemical properties for the production of crops. It has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed (including water management) according to modern farming methods. Farmland of Statewide Importance is defined as land similar to Prime Farmland but with minor shortcomings (e.g., steeper slopes, inability to hold water). Unique Farmland is defined as land consisting of lesser quality soils but recently used for the production of specific high economic value crops. Collectively, these valuable agricultural lands are referred to as “Farmland.”

The Williamson Act, officially entitled the California Land Conservation Act of 1965, allows local governments to enter into contracts with landowners guaranteeing them a lower rate of property assessment based on continued agricultural or open space use for ten years. The contracts can also be cancelled or not renewed. A total of only 310 acres of land in the project area are in active contracts, meaning that their owners currently expect to continue agricultural uses of the properties for the next ten years (DC&E 2006).

### 2.2.2 Environmental Impacts and Mitigation Measures

- a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? NO IMPACT**

#### **Substation**

According to the FMMP, the proposed substation site is not located on designated Farmland nor is it being used for agricultural purposes. Therefore, the development of the proposed substation would not convert designated Farmland to a non-agricultural use.

#### **Subtransmission and Telecommunication Alignments**

Although portions of the alignment of the subtransmission line modifications pass through designated Farmland, the proposed above ground modifications (e.g., pole replacement, conductor installation) would take place entirely within existing SCE utility easements that already contain wood power poles and conductor. Therefore, the acquisition of new easements potentially containing Farmland would not be required. The below ground modifications to reach the substation would require the acquisition of a new utility easement, along Flight Street between Kimball Avenue and the proposed substation; however, the acquired easement would be within the road or its right-of way, and, therefore, would not have the potential to convert existing Farmland to a non-agricultural use. Construction activities associated with the modifications would take place within existing SCE utility easements and/or public street rights-of-way, and, therefore, would not impact Farmland.

The proposed telecommunication improvements would take place entirely within existing SCE utility easements, or at the proposed (Kimball) and existing (Archibald) substations. As outlined above, fiber-optics cable would be installed along all segments of the alignment of the subtransmission line modifications. The addition of a fiber-optics cable to an alignment within existing SCE easements would not require the acquisition of new easements or land that may contain Farmland. Further, the telecommunication improvements at the Kimball and Archibald Substations would take place within the substations' footprints; therefore, no impacts to Farmland would occur. Finally, a 250-foot segment of the telecommunication alignment would be trenched underground as it crosses under an SCE 500 kV transmission line corridor. Since the trenching would take place within an existing SCE easement corridor, no impacts to Farmland are anticipated.

In conclusion, the proposed project would not convert designated Farmland to a non-agricultural use. No impact has been identified for this issue area.

**b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? NO IMPACT**

**Substation**

The site is zoned for airport-related development, owned by SCE, and presently used as a storage yard for miscellaneous farm equipment and other materials. No impacts are identified.

**Subtransmission and Telecommunication Alignments**

As previously stated, the proposed above ground subtransmission line modifications would take place entirely within existing SCE utility easements that already contain wood power poles and conductor. Therefore, the acquisition of new easements that may contain land zoned for agricultural use or under a Williamson Act contract would not be required. Although the below ground modifications would require the acquisition of a new utility easement, the acquired easement would be within Flight Street or its right-of-way, and, therefore, would not have the potential to conflict with land zoned for agricultural use or under a Williamson Act contract. Construction activities associated with the modifications would take place within existing SCE utility easements and/or public street rights-of-way, and, therefore, would not impact land zoned for agricultural use or under a Williamson Act contract.

The proposed telecommunication improvements would take place entirely within existing SCE utility easements, or at the proposed (Kimball) and existing (Archibald) substations. The addition of a fiber-optics cable to an alignment within existing SCE easements would not require the acquisition of new easements that may contain land zoned for agricultural use or under a Williamson Act contract. Further, the telecommunication improvements at the Kimball and Archibald Substations would take place within the substations' footprints; therefore, no impacts to land zoned for agricultural use or under a Williamson Act contract would occur. Finally, since the trenching associated with the 55kV crossing would take place within an existing SCE easement corridor, no impacts to land zoned for agricultural use or under a Williamson Act contract are anticipated.

In conclusion, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact has been identified for this issue area.

**c. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use? NO IMPACT**

As previously stated, the proposed project would not convert Farmland to a non-agricultural use, nor would it otherwise alter the existing environment in a way that would result in further loss of existing agricultural lands. Specifically, the proposed substation site is not zoned for agricultural use and the subtransmission line modifications and telecommunication improvements, including their construction, would take place entirely within existing and/or acquired SCE utility easements, public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. Therefore, these project components would not change the existing environment in a way that could result in the conversion of Farmland to non-agricultural use. No impact has been identified for this issue area.

It is worth noting that while a large portion of the proposed project's surrounding land uses remain in agricultural production, the transition from primarily agricultural to residential and industrial uses is underway within the project area. As previously discussed, the proposed project would accommodate this planned growth by supplying electricity to this rapidly urbanizing area.

2.3 AIR QUALITY

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>III. AIR QUALITY:</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.) Would the project conflict with the State goal of reducing greenhouse gas emissions in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3.1 Setting

The proposed project is located within the South Coast Air Basin (SCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. SCAB is a federal Air Quality Control Region (AQCR) established by the Clean Air Act (CAA), and a state regional air basin designated by the California Air Resources Board (CARB). CARB is the agency with the legal responsibility for regulating mobile source emissions. The South Coast Air Quality Management District (SCAQMD) is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within Riverside County and throughout SCAB. SCAQMD also has responsibility for monitoring air quality, setting and enforcing limits for source emissions, and preparing regional air quality plans under the state and federal CAAs.

2.3.1.1 Criteria Pollutants

The CAA of 1970 required the United States Environmental Protection Agency (USEPA) to adopt ambient air quality standards. Subsequently, USEPA established National Ambient Air Quality Standards (NAAQS), which represent the maximum threshold levels for ambient air pollution that is considered safe

for public health and welfare. As required by law, air quality standards developed by individual states must be equal to, or more stringent than those established by the USEPA. In California, CARB has established California Ambient Air Quality Standards (CAAQS) for managing air quality within the state.

California air basins that fail to meet NAAQS and CAAQS standards are identified as non-attainment areas. When an air basin receives a non-attainment classification status, regional air quality management agencies are required to develop detailed plans to lower pollution emissions in order to reach attainment, and polluters are subject to more stringent air permitting requirements.

According to CARB thresholds, the ambient air quality of the project area is currently in non-attainment for ozone (O<sub>3</sub>), suspended particulate matter measuring less than 10 microns (PM<sub>10</sub>), and suspended particulate matter measuring less than 2.5 microns (PM<sub>2.5</sub>). However, for all other state-regulated air quality pollutants, the ambient air quality of the project area is either unclassified or in attainment (CARB 2006). The attainment status for each NAAQS and CAAQS pollutant is shown in Table 2.3-1.

The SCAQMD has established three sets of criteria for determining the significance of emissions associated with the construction and operation of new projects. The first set of criteria establishes daily limits for a project's construction emissions. Daily thresholds are shown in Table 2.3-2.

The second set of criteria applied to emissions associated with new projects is based on the toxicity of pollutants. SCAQMD rules associated with toxic air pollutants apply only to stationary source emissions. Emissions from mobile sources (e.g., automobiles) are regulated by the USEPA (interstate) and CARB (intrastate).

The third and final set of criteria establishes thresholds for ambient concentrations of state- and federal-regulated air quality pollutants. These thresholds are shown in Table 2.3-3.

Construction emissions would vary on a day-by-day basis depending on the number and type of equipment used. Emissions rates for construction equipment were estimated using coefficients published by the SCAQMD and the results of an URBEMIS Air Quality Model.

### *2.3.1.2 Greenhouse Gases*

Gases that trap heat in the atmosphere are called greenhouse gases. The major concern with greenhouse gases is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, most agree that there is a direct link between increased emissions of greenhouse gases and long term global temperature. What greenhouse gases have in common is that they allow sunlight to enter the atmosphere, but trap a portion of the outward-bound infrared radiation which warms the air. The process is similar to the effect greenhouses have in raising the internal temperature, hence the name greenhouse gases. Both natural processes and human activities emit greenhouse gases. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature; however, emissions from human activities such as electricity production and the use of motor vehicles have elevated the concentration of greenhouse gases in the atmosphere. This accumulation of greenhouse gases has contributed to an increase in the temperature of the earth's atmosphere and has contributed to global climate change.

## Initial Study/Mitigated Negative Declaration

**Table 2.3-1. Federal and California Ambient Air Quality Standards and SCAB Attainment Status**

Air Pollutant	CAAQS	State SCAB Attainment Status	NAAQS	Federal SCAB Attainment Status
Ozone (O <sub>3</sub> )	8-hr average 0.07 ppm (137 µg/m <sup>3</sup> )	Non-attainment/ Extreme	8-hr average 0.08 ppm (157 µg/m <sup>3</sup> )	Non-attainment/ Severe
	1-hr average 0.09 ppm (180 µg/m <sup>3</sup> )	Non-attainment/ Extreme	None	Non-attainment/ Extreme
Carbon Monoxide (CO)	8-hr average 9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	8-hr average 9.0 ppm (10 mg/m <sup>3</sup> )	Attainment
	1-hr average 20 ppm (23 mg/m <sup>3</sup> )	Attainment	1-hr average 35 ppm (40 mg/m <sup>3</sup> )	Non-attainment <sup>1</sup>
Nitrogen Dioxide (NO <sub>2</sub> )	1-hr average 0.25 ppm (470 µg/m <sup>3</sup> )	Attainment	Annual arithmetic mean 0.053 ppm (100 µg/m <sup>3</sup> )	Unclassified
Sulfur Dioxide (SO <sub>2</sub> )	24-hr average 0.04 ppm (105 µg/m <sup>3</sup> )	Attainment	Annual arithmetic mean 0.03 ppm (80 µg/m <sup>3</sup> )	Attainment
	1-hr average 0.25 ppm (655 µg/m <sup>3</sup> )	Attainment	24-hr average 0.14 ppm (365 µg/m <sup>3</sup> )	Attainment
Suspended Particulate Matter (PM <sub>10</sub> )	Annual arithmetic mean 20 µg/m <sup>3</sup>	Non-attainment	Annual arithmetic mean 50 µg/m <sup>3</sup>	Non-attainment/ Serious
	24-hr average 50 µg/m <sup>3</sup>	Non-attainment	24-hr average 150 µg/m <sup>3</sup>	Non-attainment/ Serious
Particulate Matter (PM <sub>2.5</sub> )	Annual arithmetic mean 12 µg/m <sup>3</sup>	Non-attainment	Annual arithmetic mean 15 µg/m <sup>3</sup>	Non-attainment
			24-hr average 65 µg/m <sup>3</sup>	Non-attainment
Sulfates	24-hr average 25 µg/m <sup>3</sup>	Attainment	None	Not Applicable
Lead	30-day average 1.5 µg/m <sup>3</sup>	Attainment	Calendar quarter 1.5 µg/m <sup>3</sup>	No Data
Hydrogen Sulfide (H <sub>2</sub> S)	1-hr average 0.03 ppm (42 µg/m <sup>3</sup> )	Unclassified	None	Not Applicable
Visibility-reducing Particles	<sup>2</sup>	Unclassified	None	Not Applicable

Source: CARB 2006

<sup>1</sup>Although the SCAB is classified non-attainment for CO, the air quality meets national CO standards (CARB 2004).

<sup>2</sup>State criterion for non-attainment of visibility-reducing particles is the amount of particles present to produce an extinction coefficient of 0.23/km when relative humidity is less than 70 percent.

µg/m<sup>3</sup> = microgram per cubic meter

mg/m<sup>3</sup> = milligram per cubic meter

ppm = parts per million

**Table 2.3-2. SCAQMD Construction Emission Thresholds**

Pollutant		Construction Emission Threshold
O <sub>3</sub> Precursors	NO <sub>x</sub>	100 lbs/day
	VOC	75 lbs/day
PM <sub>10</sub>		150 lbs/day
SO <sub>x</sub>		150 lbs/day
CO		550 lbs/day
Lead		3 lbs/day

Source: SCAQMD 2006.

**Table 2.3-3. SCAQMD Ambient Concentration Thresholds**

Criteria Pollutant	Ambient Concentration Thresholds
NO <sub>2</sub>	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:
1-hr average	0.25 ppm (State)
annual average	0.053 ppm (Federal)
PM <sub>10</sub>	10.4 µg/m <sup>3</sup> (construction)
24-hr average	2.5 µg/m <sup>3</sup> (operation)
annual geometric average	1.0 µg/m <sup>3</sup>
annual arithmetic mean	20 µg/m <sup>3</sup>
Sulfate	
24-hr average	25 µg/m <sup>3</sup>
CO	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards:
1-hr average	20 ppm (State)
8-hr average	9.0 ppm (State/Federal)

Source: SCAQMD 2006.

The principal greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H<sub>2</sub>O). CO<sub>2</sub> is the most common reference gas for climate change. To account for the warming potential of greenhouse gases, greenhouse gas emissions are often quantified and reported as CO<sub>2</sub> equivalents (CO<sub>2</sub>E). Large emission sources are reported in million metric tons of CO<sub>2</sub>E (MMTCO<sub>2</sub>E).

Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB 2007). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

The California Energy Commission (CEC) estimated that in 2004, California produced 492 million gross metric tons of CO<sub>2</sub>-equivalent greenhouse gas emissions (CEC 2006). The CEC found that transportation is the source of 41 percent of the State's GHG emissions; followed by electricity generation at 22 percent and industrial sources at 21 percent. In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which set forth a series of target dates by which statewide emission of greenhouse gases would be progressively reduced, as follows:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

In 2006, the California Legislature passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires CARB to design and implement emission limits, regulations, and other feasible and cost-effective statewide measures, such that greenhouse gas emissions are reduced to 1990 levels by 2020.

In June 2007, CARB directed its staff to pursue 37 early actions for reducing greenhouse gas emissions under AB 32. The broad spectrum of strategies to be developed, including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate greenhouse gas reductions, and green ports, reflects the serious nature of the threat of climate change and requires action as soon as possible (CARB 2007).

In addition to approving the 37 greenhouse gas reduction strategies, CARB directed its staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within six months. The general sentiment of CARB suggested a desire to try to pursue greater greenhouse gas emissions reductions in California in the near-term. Since the June 2007 CARB hearing, CARB staff has evaluated all 48 recommendations submitted by several stakeholder and several internally-generated staff ideas and published the *Expanded List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration* in October 2007 (CARB 2007). Based on its additional analysis, CARB staff is recommending the expansion of the early action list to a total of 44 measures (see Table 2.3-4).

**Table 2.3-4. Recommended AB 32 Greenhouse Gas Measures to be Initiated by CARB Between 2007 and 2012**

Id #	Sector	Strategy name
1	Fuels	Above Ground Storage Tanks
2	Transportation	Diesel – Offroad equipment (non-agricultural)
3	Forestry	Forestry protocol endorsement
4	Transportation	Diesel – Port trucks
5	Transportation	Diesel – Vessel main engine fuel specifications
6	Transportation	Diesel – Commercial harbor craft
7	Transportation	Green ports
8	Agriculture	Manure management (methane digester protocol)
9	Education	Local gov. Greenhouse Gas reduction guidance / protocols
10	Education	Business Greenhouse Gas reduction guidance / protocols
11	Energy Efficiency	Cool communities program
12	Commercial	Reduce high Global Warming Potential (GWP) Greenhouse Gas in products
13	Commercial	Reduction of PFCs from semiconductor industry
14	Transportation	SmartWay truck efficiency
15	Transportation	Low Carbon Fuel Standard (LCFS)
16	Transportation	Reduction of HFC-134a from DIY Motor Vehicle AC servicing
17	Waste	Improved landfill gas capture
18	Fuels	Gasoline disperser hose replacement
19	Fuels	Portable outboard marine tanks
20	Transportation	Standards for off-cycle driving conditions
21	Transportation	Diesel – Privately owned on-road trucks
22	Transportation	Anti-idling enforcement
23	Commercial	SF <sub>6</sub> reductions from the non-electric sector
24	Transportation	Tire inflation program
25	Transportation	Cool automobile paints
26	Cement	Cement (A): Blended cements
27	Cement	Cement (B): Energy efficiency of California cement facilities
28	Transportation	Ban on HFC release from Motor Vehicle AC service / dismantling
29	Transportation	Diesel – offroad equipment (agricultural)
30	Transportation	Add AC leak tightness test and repair to Smog Check
31	Agriculture	Research on Greenhouse Gas reductions from nitrogen land applications
32	Commercial	Specifications for commercial refrigeration
33	Oil and Gas	Reduction in venting / leaks from oil and gas systems
34	Transportation	Requirement of low-GWP Greenhouse Gases for new Motor Vehicle ACs
35	Transportation	Hybridization of medium and heavy-duty diesel vehicles
36	Electricity	Reduction of SF <sub>6</sub> in electricity generation
37	Commercial	High GWP refrigerant tracking, reporting and recovery program
38	Commercial	Foam recovery / destruction program

Id #	Sector	Strategy name
39	Fire Suppression	Alternative suppressants in fire protection systems
40	Transportation	Strengthen light-duty vehicle standards
41	Transportation	Truck stop electrification with incentives for truckers
42	Transportation	Diesel – Vessel speed reductions
43	Transportation	Transportation refrigeration – electric standby
44	Agriculture	Electrification of stationary agricultural engines

Source: CARB 2007

The 2020 target reductions are currently estimated to be 174 MMTCO<sub>2</sub>E. In total, the 44 recommended early actions have the potential to reduce greenhouse gas emissions by at least 42 MMTCO<sub>2</sub>E by 2020, representing about 25 percent of the estimated reductions needed by 2020. As indicated in Table 2.3-4, the 44 measures are in the sectors of fuels, transportation, forestry, agriculture, education, energy efficiency, commercial, solid waste, cement, oil and gas, electricity, and fire suppression.

In addition to identifying early actions to reduce greenhouse gases, CARB is also developing the greenhouse gas mandatory reporting regulation pursuant to requirements of AB32. Those regulations are expected to require reporting for certain types of facilities that make up the bulk of the stationary source emissions in California. Currently, the draft regulation language identifies major facilities as those that generate more than 25,000 metric tons of CO<sub>2</sub>E per year. This reporting limit is consistent with European Union reporting. Cement plants, oil refineries, electric generating facilities/providers, co-generation facilities, hydrogen plants, and other stationary combustion sources that typically emit more than 25,000 metric tons of CO<sub>2</sub> per year, make up approximately 94 percent of the point source CO<sub>2</sub> emissions in California (CARB 2007).

In October 2008, CARB issued a preliminary draft staff proposal on evaluating greenhouse gas emissions under CEQA (CARB 2008). The paper is a first step toward developing recommended statewide interim thresholds of significance for GHGs that may be adopted by local agencies. The proposal is incomplete regarding construction emissions. For example, it defines significance of construction emissions based on equipment meeting interim CARB performance standards that have yet to be identified. However, for operations, the proposal indicates that an industrial project that would emit 7,000 metric tons CO<sub>2</sub>E or more per year from non-transportation related sources would be considered significant.

### 2.3.2 Environmental Impacts and Mitigation Measures

**a. Would the project conflict with or obstruct implementation of the applicable air quality plan? NO IMPACT**

The proposed project is required to adhere to SCAQMD’s Air Quality Management Plan (AQMP). The AQMP provides a blueprint as to how the SCAQMD expects to bring the Basin into attainment for all ambient air quality standards (both NAAQS and CAAQS). SCAQMD uses existing land uses and growth projections to forecast projected air pollution emissions in the Basin and to establish the parameters of the AQMP. A project would be inconsistent with the AQMP if it results in population and/or employment growth that exceeds the growth estimates included in the assumptions of the AQMP.

As proposed, the project would not create any new full-time or part-time positions of employment, nor would it generate new housing and population. Up to 15 workers would be needed for construction of the proposed project; however, none of these positions would be permanent. Two to three maintenance visits per week by existing SCE employees would be required during operation of the proposed substation. Furthermore, SCAQMD’s AQMP anticipates and allows for population growth in the project area, which involves construction of a certain amount of new infrastructure. Since the proposed project is facilitating planned growth in the project area, it would not conflict with or obstruct implementation of the AQMP. No impact has been identified for this issue area.

**b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

All construction phases of the proposed project are proposed to occur simultaneously. However, to ensure that emissions would not exceed SCAQMD construction significance thresholds, Mitigation Measure Air1 would require construction activities to be conducted in at least two sequential phases. In addition, SCE would be required to implement specific fugitive dust control measures pursuant to SCAQMD Rule 403. The mitigated construction-related emission estimates for two sequential phases are shown in Tables 2.3-5 and 2.3-6. Detailed construction emissions calculations are presented in Appendix A. As shown, mitigated emissions would remain below SCAQMD thresholds at any point during construction of the proposed project. Therefore, construction of the proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Impacts for this issue area would be mitigated to less than significant.

**Table 2.3-5. Estimated Mitigated Construction Emissions for Phase I of Proposed Project**

Site	Days	Activity	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>	VOC <sup>1</sup>
Substation	40	Grading	14.1	31.6	1.8	1.7	4.5	3.1
	45	Survey	0.5	0.0	0.0	0.0	0.0	0.1
	50	Civil	12.4	23.3	1.5	1.4	4.5	2.4
Subtransmission Line Modifications (overhead)	60	Modifications	1.7	2.1	0.0	0.0	0.0	0.2
	75	Wire replacement	1.6	1.4	0.0	0.0	0.0	0.2
Subtransmission Line Modifications (underground)	2	TSP footing installation	6.5	14.6	0.8	0.7	2.6	1.2
	6	Construction of 66 kV duct bank	3.6	6.4	0.7	0.6	0.9	1.0
	4	Install 2 vaults	2.0	5.3	0.1	0.1	0.0	0.3
Worst-case scenario construction emissions estimated for Phase I			42.4	84.8	4.9	4.5	12.5	8.5
SCAQMD threshold of significance for construction emissions			550	100	150	55	150	75
Exceedence of threshold?			No	No	No	No	No	No

Source: SCE 2006

Notes: All estimated emissions are presented in lbs/day. PM<sub>2.5</sub> emission estimates and significance threshold are based on SCAQMD methodology (SCAQMD 2006).

<sup>1</sup> VOC = Volatile Organic Compound

**Table 2.3-6. Estimated Mitigated Construction Emissions for Phase II of Proposed Project**

Site	Days	Activity	CO	NO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>	VOC <sup>1</sup>
Substation	45	Survey	0.5	0.0	0.0	0.0	0.0	0.1
	80	Electrical	7.5	15.6	0.8	0.7	1.6	1.5
	20	Transformer setup	4.8	9.3	0.6	0.6	1.2	1.1
	40	Test	0.2	0.3	0.0	0.0	0.0	0.0
	5	Paving contractor	11.6	21.9	1.5	1.4	3.2	2.7
	7	Fence contractor	2.7	4.8	0.4	0.4	0.0	0.7
Subtransmission Line Modifications (overhead)	2	Final connect of new lines	1.6	1.4	0.0	0.0	0.0	0.2
Subtransmission Line Modifications (underground)	5	Cable pulling	4.6	8.2	0.4	0.4	1.3	0.8
	5	Cable splicing and terminating	3.0	6.8	0.3	0.3	1.0	0.6
Telecom Improvements	24	Substation	0.5	0.0	0.0	0.0	0.0	0.1
	24	Overhead	0.7	1.3	0.0	0.0	0.0	0.1
	7	Trenching	3.7	8.3	0.7	0.6	0.9	1.0
	5	Boring	4.1	10.7	0.4	0.4	2.6	0.5
	6	Underground	0.7	1.3	0.0	0.0	0.0	0.1
Worst-case scenario construction emissions estimated for Phase II			<b>47.7</b>	<b>91.6</b>	<b>5.2</b>	<b>4.8</b>	<b>11.7</b>	<b>9.6</b>
SCAQMD threshold of significance for construction emissions			<b>550</b>	<b>100</b>	<b>150</b>	<b>55</b>	<b>150</b>	<b>75</b>
Exceedence of threshold?			<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: SCE 2006

Notes: All estimated emissions are presented in lbs/day. PM<sub>2.5</sub> emission estimates and significance threshold are based on SCAQMD methodology (SCAQMD 2006).

**Mitigation**

**MM Air1:** SCE shall prepare a Construction Emissions Control Plan that outlines SCE’s approach for ensuring that daily construction emissions do not exceed the SCAQMD’s significance thresholds for construction activities. The plan shall be submitted to the CPUC for review and approval at least 30 days prior to the estimated start of construction activities. SCE shall require the approved plan to be implemented during all construction activities. The plan shall include, at a minimum, the following requirements:

- A detailed description of construction activity phasing that would be required to ensure that emissions remain below SCAQMD daily significance thresholds. All assumptions and rationale for all assumptions, including truck trips per day, miles per trip, daily equipment inventories, equipment hours, and amounts of total areas and volumes of material to be disturbed shall be defined in the plan.
- All construction material deliveries shall be scheduled to occur outside of peak traffic hours (7:00 to 10:00 am and 4:00 to 7:00 pm) to the extent feasible; truck trips during peak traffic hours shall be minimized to the extent feasible.
- Engine idle time shall be restricted to no more than five minutes in duration.

- All on-road construction vehicles shall be licensed.
- All off-road stationary and portable gasoline powered equipment shall have USEPA Phase 1/Phase 2 compliant engines.

Operational criteria pollutant emissions associated with the proposed project would be negligible (e.g., two-three vehicle trips/week associated with routine maintenance). Therefore, operation of the proposed project would not violate air quality standards or contribute substantially to an existing or projected air quality violation. A less than significant impact has been identified for this issue area.

**c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Under state and federal standards, the proposed project is located in a non-attainment area for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAQMD recommends analyzing a project's individual air quality impacts to determine its contribution to a cumulatively considerable net increase in a criteria pollutant. An URBEMIS Air Quality Model (Version 8.7) concluded that, with implementation of Mitigation Measure Air1, construction activities associated with the proposed project would not exceed the emission thresholds established by the SCAQMD for ozone precursors, PM<sub>10</sub>, and PM<sub>2.5</sub>; therefore, construction of the proposed project would not generate a considerable net increase in non-attainment criteria pollutants (Appendix A).

Operational emissions associated with the proposed project would be negligible (e.g., 2-3 vehicle trips/week associated with routine maintenance). Therefore, operation of the proposed project would not generate a considerable net increase in non-attainment criteria pollutants. A less than significant impact with incorporation of mitigation measure Air1 has been identified for this issue area.

**d. Would the project expose sensitive receptors to substantial pollutant concentrations? LESS THAN SIGNIFICANT IMPACT**

Sensitive receptors are defined as those segments of the population most susceptible to poor air quality (i.e., children, elderly and the sick) and certain at-risk sensitive land uses such as schools, hospitals, parks, or residential communities. Land use conflicts can arise when sensitive receptors are located next to major sources of air pollutant emissions.

There are a number of sensitive receptors in the project area. Specifically, Ayala Park is located within 300 feet of the Chino-Corona-Pedley 66 kV subtransmission line, south of the Chino Substation along Edison Avenue. Additionally, several segments of the subtransmission alignment parallel The Preserve, a large, partially complete residential community along Mill Creek and Kimball Avenue, south of the proposed substation. Specifically, within 0.25 miles of the subtransmission line, a portion of The Preserve has as Community Core (CC) land use designation, which allows for schools.

To assist agencies in determining whether a project may generate significant adverse localized air quality impacts, the SCAQMD has developed mass rate look-up tables by source receptor areas (SRAs). These tables are intended to be used as screening tables to determine if construction or operation of a project may result in a violation of an applicable air quality standard. Mass rate thresholds for one acre sites at 25 meters (the most conservative rates available) in the Southwest San Bernardino Valley (SRA #33) are

shown in Table 2.3-7. These thresholds are expressed in pounds per day and are applicable for on-site emissions only.

**Table 2.3-7. SCAQMD Localized Significance Thresholds**

Distance to Receptor (meters)	NO <sub>x</sub> (lb/day)	CO (lb/day)	PM <sub>10</sub> (lb/day)	PM <sub>2.5</sub> (lb/day)
25	118	863	5	4

Source: SCAQMD 2008.

Although emissions from the construction and operation of new development projects can potentially cause a direct, localized concentration of pollutants at or near proposed developments or sensitive receptors, mitigated emissions (as shown in Tables 3.3-5 and 3.3-6) associated with construction of the proposed project at any one location would remain below SCAQMD localized significance thresholds. Additionally, since construction would be phased, the time of exposure for sensitive receptors to construction-related emissions would be reduced. Similarly, operational emissions associated with the proposed project would be negligible (e.g., two-three vehicle trips/week associated with routine maintenance). Since the projected construction and operational emissions associated with the proposed project are markedly below SCAQMD localized significance thresholds, it is considered highly unlikely that the proposed project would expose existing or future sensitive receptors to substantial pollutant concentrations. A less than significant impact has been identified for this issue area.

**e. Would the project create objectionable odors affecting a substantial number of people? LESS THAN SIGNIFICANT IMPACT**

The proposed project includes short-term construction activities that would involve the combustion of diesel fuel and the emission of dust. SCE would reduce the potential occurrence of odors associated with diesel exhaust through the use of either low-sulfur or ultra-low-sulfur fuel. No other substances would be used in the construction or operation of the proposed project that could have the potential to produce offensive odors. A less than significant impact has been identified for this issue area.

**f. Would the project conflict with the State goal of reducing greenhouse gas emissions in California to 1990 levels by 2020, as set forth by AB 32, California Global Warming Solutions Act of 2006? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

As with other individual small projects (e.g., projects that are not cement plants, oil refineries, electric generating facilities/providers, co-generation facilities, or hydrogen plants or other stationary combustion sources that emit more than 25,000 MTCO<sub>2</sub>E per year), the emissions increases that would result under the Kimball Substation Project would not be expected to individually have a significant impact on global climate change (CAPCOA 2008) and the primary concerns would be whether implementation of the project would conflict with the State goals for reducing greenhouse gas emissions and whether the proposed project would have a cumulatively considerable impact on global climate change.

Three types of analyses can be used to determine whether a project could conflict with the State goals for reducing greenhouse gas emissions. The analyses include reviews of:

- A. The potential conflicts with the CARB 44 early action strategies;

- B. The relative size of the project in comparison to the estimated greenhouse reduction goal of 174 MMTCO<sub>2</sub>E by 2020 and in comparison to the amount of CARB's preliminary draft threshold of 7,000 metric tons CO<sub>2</sub>E per year; and
- C. The basis parameters of a project to determine whether its design is inherently energy efficient.

Regarding analysis type A, the proposed project would not conflict with any of the CARB 44 early action strategies as identified in Table 2.3-4. Analysis type C is not relevant because the proposed project would be an electric transmission project, and it would not consume energy. Therefore, this impact discussion focuses on analysis type B.

Construction of the proposed project would result in emissions of greenhouse gases from operation of onsite construction equipment as well as from off-site worker and delivery truck trips. The most common GHGs associated with fuel combustion include CO<sub>2</sub>. Over the entire construction phase of the proposed project, approximately 0.00015 MMTCO<sub>2</sub> would be emitted (approximately 150 metric tons CO<sub>2</sub>). This represents a short-term increase in SCE's baseline GHG emissions inventory. Refer to Appendix A for all assumptions associated with the construction emissions estimate.

Operation of the proposed project may cause a small increase in GHG emissions from vehicle travel during inspection and maintenance of the proposed substation and new subtransmission lines; however, these emissions would be minimal. In addition to vehicle emissions, SF<sub>6</sub> could unintentionally leak from circuit breakers within the substation during operations of the proposed project. New sources of SF<sub>6</sub> included as part of the proposed project are five new circuit breakers, each of which would contain approximately 30 pounds of SF<sub>6</sub>. Historically, fugitive emissions of SF<sub>6</sub> from circuit breakers can exceed six percent of the SF<sub>6</sub> content annually. However, due to improvements in field maintenance policies and new equipment designs, it is estimated that fugitive emissions of SF<sub>6</sub> from the new circuit breakers would be less than one percent per year. Therefore, the anticipated emission rate from each new circuit breaker during operation would be approximately 0.3 pounds per year, and combined emissions from all new circuit breakers would be 1.5 pounds per year. SF<sub>6</sub> has a global warming potential of 23,900, which is the highest of any greenhouse gas identified by the Intergovernmental Panel on Climate Change (IPCC). Therefore, long-term operational greenhouse gas emissions associated with the proposed project would be approximately 16 metric tons CO<sub>2</sub> per year.

The State's estimated greenhouse gas reduction goal of 174 MMTCO<sub>2</sub>E by 2020 assumes a reduction of greenhouse gas emissions of approximately 30 percent compared to *business as usual* conditions. The estimated greenhouse gas emissions associated with the proposed project would be less than CARB's preliminary draft threshold amount. However, significance for this project is also based on whether the proposed project would be consistent with the State's greenhouse gas reduction goal, which would require a 30 percent reduction of greenhouse gases by 2020 compared to business as usual conditions.

Subsequent to submitting its application for the Kimball Substation Project, SCE has proposed to implement two applicant proposed measures to reduce emissions of greenhouse gases. The intent of those measures is captured in the mitigation measures below, which provide more specificity regarding implementation. The measures involve replacing an old circuit breaker that currently leaks SF<sub>6</sub> (GHG1) and replacing diesel fueled forklifts with forklifts that run on electricity (GHG2). As indicated in Table 2.3-8, approximately 78 percent of all emissions that would be associated with the proposed project, including those that would result from construction and operations, would be mitigated by year 2020 with implementation of Mitigation Measures GHG1 and GHG2. (Refer to Appendix A for all assumptions associated with estimated operational emissions and mitigation offset estimates.) Therefore, implementation of Mitigation Measures GHG1 and GHG2 would ensure that proposed project impacts related to greenhouse gas emissions would be reduced to less than significant.

**Table 2.3-8. Mitigated Greenhouse Gas Emissions (Metric Tons CO<sub>2</sub>E)**

Year	Proposed Project GHG Emissions			Mitigation Measures		Running Total After Mitigation	Total Reductions (%)
	Construction	Operations	Running Total	GHG1	GHG2		
2009	150.1	---	150.1	---	---	150.1	0
2010	---	16.3	166.4	16.3	20.4	129.7	22.1
2011	---	16.3	182.7	16.3	20.4	109.3	40.2
2012	---	16.3	199	---	20.4	105.2	47.1
2013	---	16.3	215.3	---	20.4	101.1	53.0
2014	---	16.3	231.6	---	20.4	97	58.1
2015	---	16.3	247.9	---	20.4	92.9	62.5
2016	---	16.3	264.2	---	20.4	88.8	66.4
2017	---	16.3	280.5	---	20.4	84.7	69.8
2018	---	16.3	296.8	---	20.4	80.6	72.8
2019	---	16.3	313.1	---	20.4	76.5	75.6
2020	---	16.3	329.4	---	20.4	72.4	78.0

**Mitigation**

**MM GHG1:** SCE shall replace a circuit breaker with an SF<sub>6</sub> capacity of at least 30 pounds that is estimated to be leaking at a rate of at least six percent of its SF<sub>6</sub> content each year. At the time of replacement, the circuit breaker to be replaced shall have an expected remaining life of at least two additional years. The replacement breaker shall have a one percent leakage rate guaranteed by manufacturers. SCE shall provide documentation to the CPUC that verifies that the replacement has occurred prior to commencement of project operations, and that the replaced circuit breaker has been permanently removed from service (e.g., destroyed or recycled as scrap metal).

**MM GHG2:** Prior to the commencement of operations of the Kimball Substation project, SCE shall replace four diesel powered forklifts that have horsepower ratings of at least 50 hp with electric forklifts. SCE shall provide documentation to the CPUC that verifies the replacement has occurred, and that the replaced forklifts have been permanently removed from SCE’s equipment inventory.

2.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES:</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.4.1 Setting

Although currently transitioning to urban and commercial uses, land uses in the project area have historically centered on agriculture and related activities, dominated by dairy operations. As a result of this land use, biological habitats and vegetation communities in the project area have been severely degraded by decades of agricultural practices. Moreover, these habitats and communities are undergoing further degradation as the project area continues to transition from primarily agricultural to residential and commercial uses.

Biological surveys were conducted by SCE in July 2005 and May 2006 to identify existing biological resources and determine if the proposed project would result in potentially significant impacts to those resources, including impacts to sensitive plant and animal species (Appendix B). The July 2005 field

survey identified special status species habitat for the proposed substation site only; whereas, the May 2006 survey identified habitat along the alignment of the proposed subtransmission line modifications.

In addition to these surveys, a Delhi Sands Flower-loving Fly (DSF) Habitat Assessment was conducted for the proposed substation site in July 2005 by David K. Faulkner (Appendix B). Furthermore, HDR Engineering, Inc. reviewed the previous studies and conducted a Biological Reconnaissance Survey (BRS) for the proposed project in October 2007. The survey area for the BRS included the alignment of the proposed subtransmission line modifications (25 feet on each side) and the proposed substation site. This survey was used to verify that project site conditions had not changed substantially since the 2005 and 2006 SCE surveys (Appendix C). The portion of the telecommunication alignment that deviates from the alignment of the proposed subtransmission line modification was not included in any of the biological surveys; however, this portion of the telecommunication alignment would be located along the existing subtransmission line footprint where the ground surface was previously disturbed. Since no new ground distributing activities are proposed, no new biological resource impacts are anticipated to occur.

### Literature Search and Review

Prior to the July 2005 and May 2006 biological surveys, records from the California Natural Diversity Database (CNDDDB) were reviewed to determine the potential occurrence of sensitive or special status species and/or habitats within the project area, which includes a one-mile radius surrounding the proposed project. Special status species include plants and animals that are either listed as endangered or threatened under the Federal or California Endangered Species Acts (CESA); listed as rare under the California Native Plant Protection Act; or considered to be rare (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, California Native Plant Society), and the scientific community. The Corona North and Prado Dam United States Geological Survey (USGS) 7.5 minute quadrangles were used to conduct the searches and the results are shown in Table 2.4-1. Specifically, the table shows the sensitive or special status plant and animal species known to exist within the project area, and the table includes a brief description of their preferred habitat. A review of the current published literature pertaining to listed species was also used to identify potential sensitive plant and animal species within the project area.

The results from the CNDDDB records searches (Table 2.4-1) were used as a guide during the July 2005 and May 2006 biological surveys for determining the potential occurrence of sensitive or special status species and/or habitats within the project area. During the field surveys, the habitat for each special status species identified in the CNDDDB records searches was qualified using the following categories:

*No:* Habitat identified in CNDDDB records searches is not available within the project area to support this species;

*Marginal:* Habitat identified in the CNDDDB records searches is marginally available within the project area and has the potential to support this species; or

*Yes:* Habitat identified in the CNDDDB records searches is adequately available within the project area and can support this species.

**Table 2.4-1. CNDDB Records Search of Corona North and Prado Dam USGS 7.5' Quadrangles**

Scientific Name	Common Name	Listing Status	General Habitat	Micro Habitat
<b>Plants</b>				
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral Sand-verbena	1B	Chaparral, coastal scrub.	Sandy areas. 80-1600 meters.
<i>Atriplex coulteri</i>	Coulter's Saltbush	1B	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Ocean bluffs, ridge tops, as well as alkaline low places. 10-440 meters.
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate Mariposa Lily	1B	Coastal scrub, chaparral, valley and foothill grassland.	Dry, rocky open slopes and rock outcrops. 120-850 meters.
<i>Dudleya multicaulis</i>	Many-stemmed Dudleya	1B	Chaparral, coastal scrub, valley and foothill grassland. Endemic to southern California.	In heavy, often clay-type soils or grassy slopes. 0-790 meters.
<i>Eriastrum densifolium</i> ssp. <i>Sanctorum</i>	Santa Ana River Woollystar	FE, SE, 1B	Coastal scrub, chaparral. Formerly known from Orange and San Bernardino Counties, now know from one extended population.	In sandy soils on river floodplains or terraced fluvial deposits. 150-610 meters.
<i>Sidalcea neomexicana</i>	Salt Spring Checkerbloom	2	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marches. 0-1500 meters.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's Spineflower	3	Coastal scrub, chaparral.	Dry slopes and flats; sometimes at interface of two vegetation types, such as chaparral and oak woodland; dry, sand soils. 40-1705 meters.
<i>Senecio aphanactis</i>	Rayless Ragwort	2	Cismontane woodland, coastal scrub.	Drying alkaline flats. 20-575 meters.
<b>Fish</b>				
<i>Catostomus santaanae</i>	Santa Ana Sucker	FT, SC	Endemic to Los Angeles basin south coastal streams.	Habitat generalist, but prefer sand-rubble-boulder bottoms, cool, clear water and algae.
<i>Gila orcutti</i>	Arroyo Chub	SC	Los Angeles basin in southern streams.	Slow water stream sections with mud or sand bottoms. Feed heavily on aquatic vegetation and associated invertebrates.
<b>Reptiles</b>				
<i>Crotalus ruber ruber</i>	Northern Red-diamond Rattlesnake	SC	Chaparral, woodland, grassland, and desert areas from coastal San Diego county to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.
<i>Clemmys marmorata pallida</i>	Southern Pond Turtle	FSS, SC	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 6,000 feet.	Requires basking sites such as partially submerged logs, vegetated mats, or open mud banks. Needs suitable nesting sites.

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Scientific Name	Common Name	Listing Status	General Habitat	Micro Habitat
<i>Aspidoscelis hyperythrus</i>	Orange-throated Whiptail	SC	Inhabits low elevation coastal scrub, chaparral and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food – termites.
<b>Birds</b>				
<i>Agelaius tricolor</i>	Tri-colored Blackbird	SC	Highly colonial species, most numerous in the Central Valley and vicinity. Largely endemic to California.	Requires open water, protective nesting substrate and foraging area with insect prey within a few km of the colony.
<i>Atmosphila ruficeps canescens</i>	Southern California Rufous-crowned Sparrow	SC	Resident in southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.
<i>Amphispiza belli belli</i>	Bell's Sage Sparrow	SC	Nests in hard chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yards apart.
<i>Aquila chrysaetos</i>	Golden Eagle	SC	Rolling foothill or coast-range terrain, where open grassland turns to scattered oaks, sycamores, or large digger pines.	Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.
<i>Asio otus</i>	Long-eared Owl	SC	Found in riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.
<i>Athene cunicularia</i>	Burrowing Owl	SC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, especially California ground squirrel.
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo	SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nest in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.
<i>Dendroica petechia brewsteri</i>	Yellow Warbler	SC	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging.	Also nests in montane shrubbery in open conifer forests.
<i>Empidonax traillii extimus</i>	Southern Willow Flycatcher	FE, SE	Inhabits extensive thickets of low, dense willows on edge of wet meadow, ponds, or backwater; 2000-8000 foot elevation.	Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.

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Scientific Name	Common Name	Listing Status	General Habitat	Micro Habitat
<i>Icteria virens</i>	Yellow-breasted Chat	SC	Summer resident, inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forage and nest within 10 feet of the ground.
<i>Poliioptila californica californica</i>	Coastal California Gnatcatcher	FT, SC	Obligate permanent resident of coastal sage scrub below 2,500 feet in southern California.	Low, coastal sage scrub, in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	FE, SE	Summer resident of southern California. Inhabits low riparian growth in the vicinity of water or in dray river bottoms, below 2,000 feet.	Nests placed along margins of bushes or twigs projecting into pathways, usually willow, Baccharis, mesquite.
<b>Mammals</b>				
<i>Dipodomys stephensi</i>	Stephens' Kangaroo Rat	FE, ST	Primarily annual and perennial grasslands, but also occurs in coastal sage scrub and sage scrub with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm sand.
<i>Eumops perotis californicus</i>	Western (California) Mastiff Bat	SC	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.

**Status Codes:**

Federal	State	CNPS
FT=Federal Threatened	ST=State Threatened	1A=Presumed Extinct in CA
FE=Federal Endangered	SE=State Endangered	1B=Rare, Threatened or Endangered in CA and elsewhere
FPE=Federal Proposed Endangered	SR=State Rare	2=Rare, Threatened or Endangered in CA but more common elsewhere
FPT=Federal Proposed Threatened	SC=Species of Concern	3=More information needed
FSC=Federal Species of Concern		4="Watch List"

Additionally, each special status species was evaluated during the July 2006 and May 2006 biological surveys for its potential to occur within the project area and qualified using the following categories:

*Low:* This species is unlikely to be found in the project area. No historical record exists for this species.

*Moderate:* Based on the local environmental conditions, there is the potential for this species to exist in the project area. Although no historical record exists for this species, the habitat in the vicinity of the proposed project site<sup>4</sup> (an approximate 5 square mile area) is suitable to support this species.

*High:* The environmental conditions for this species are ideal and favorable. The probability of finding the species in the project area during field surveys is high. A historical record for this species exists and the habitat in vicinity of the proposed project site is suitable for this species.

The results of the surveys for potential sensitive species are summarized in Table 2.4-2.

As shown in Table 2.4-2, no sensitive or special status species were observed within the proposed project site during the field surveys, which were conducted during California's breeding season (typically February-September). In addition, the field surveys found that the sensitive species identified in Table 2.4-1 have a low potential to occur within the proposed project site do to a lack of suitable habitat, with the exception of the DSF and the burrowing owl. As outlined above, a DSF protocol survey was conducted for the proposed substation site in July 2005 but no indicator plants or soils for the DSF were identified. During the May 2006 survey of the alignment of the proposed subtransmission line modification, potential habitat for the burrowing owl was identified along the segment of the alignment that parallels Magnolia Avenue, between Edison and Kimball Avenues.

### 2.4.2 Environmental Impacts and Mitigation Measures

- a. **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

#### Substation

According to the July 2005 biological survey, the biological habitat at the proposed substation site has been severely degraded by past agricultural practices and existing site development, making it unsuitable for sensitive species. Specifically, the site contains nine small walnut trees surrounded by non-native vegetation. The disturbed, non-native and weedy vegetation consisted of black mustard (*Brassica nigra*), tree tobacco (*Nicotiana glauca*), tamarisk (*Tamarix* spp.), rattlesnake weed (*Euphorbia albomarginata*), Russian thistle (*Salsola tragus*), goosefoot (*Chenopodium* spp.), crystalline iceplant (*Mesembryanthemum crystallinum*), asters (*Asteraceae*), and non-native grasses. Examination of the habitat at the proposed substation site, relative to the habitat requirements for each of the species in Table 2.4-1, indicates that the listed and sensitive species identified in the CNDDDB records searches do not have the potential to occur at the site.

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<sup>4</sup> The proposed project site refers to the alignment of the proposed subtransmission line modification, the proposed substation site, and the telecommunication improvements. The project area includes a one-mile radius surrounding the proposed project site.

**Table 2.4-2. Sensitive Species with the Potential to Occur in the Vicinity of the Proposed Project Site**

Scientific Name	Common Name	Listing Status	Habitat in Survey Area	Occurrence Potential	Observed in Field
<b>Plants</b>					
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral Sand-verbena	1B	No	Low	No
<i>Atriplex coulteri</i>	Coulter's Saltbush	1B	No	Low	No
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate Mariposa Lily	1B	No	Low	No
<i>Dudleya multicaulis</i>	Many-stemmed Dudleya	1B	No	Low	No
<i>Eriastrum densifolium</i> ssp. <i>Sanctorum</i>	Santa Ana River Woollystar	FE, SE, 1B	No	Low	No
<i>Sidalcea neomexicana</i>	Salt Spring Checkerbloom	2	No	Low	No
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's Spineflower	3	No	Low	No
<i>Senecio aphanactis</i>	Rayless Ragwort	2	No	Low	No
<b>Invertebrates</b>					
<i>Rhaphiomidas terminatus abdominalis</i>	Delhi Sands Flower-loving Fly	FE	Marginal	Low	No
<b>Fish</b>					
<i>Catostomus santaanae</i>	Santa Ana Sucker	FT, SC	No	Low	No
<i>Gila orcutti</i>	Arroyo Chub	SC	No	Low	No
<b>Reptiles</b>					
<i>Crotalus ruber ruber</i>	Northern Red-diamond Rattlesnake	SC	No	Low	No
<i>Clemmys marmorata pallida</i>	Southern Pond Turtle	FSS, SC	No	Low	No
<i>Aspidozelis hyperythrus</i>	Orange-throated Whiptail	SC	No	Low	No
<b>Birds</b>					
<i>Agelaius tricolor</i>	Tri-colored Blackbird	SC	No	Low	No
<i>Atmosphila ruficeps canescens</i>	Southern California Rufous-crowned Sparrow	SC	No	Low	No
<i>Amphispiza belli belli</i>	Bell's Sage Sparrow	SC	No	Low	No
<i>Aquila chrysaetos</i>	Golden Eagle	SC	No	Low	No
<i>Asio otus</i>	Long-eared Owl	SC	No	Low	No
<i>Athene cunicularia</i>	Burrowing Owl	SC	Marginal	Moderate	No
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo	SE	No	Low	No
<i>Dendroica petechia brewsteri</i>	Yellow Warbler	SC	No	Low	No
<i>Empidonax traillii extimus</i>	Southern Willow Flycatcher	FE, SE	No	Low	No
<i>Icteria virens</i>	Yellow-breasted Chat	SC	No	Low	No
<i>Poliopitila californica californica</i>	Coastal California Gnatcatcher	FT, SC	No	Low	No
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	FE, SE	No	Low	No

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Scientific Name	Common Name	Listing Status	Habitat in Survey Area	Occurrence Potential	Observed in Field
<i>Mammals</i>					
<i>Dipodomys stephensi</i>	Stephens' Kangaroo Rat	FE, ST	No	Low	No
<i>Eumops perotis californicus</i>	Western (California) Mastiff Bat	SC	No	Low	No

Source: SCE 2006

**Status Codes:**

Federal	State	CNPS
FT=Federal Threatened	ST=State Threatened	1A=Presumed Extinct in CA
FE=Federal Endangered	SE=State Endangered	1B=Rare, Threatened or Endangered in CA and elsewhere
	SR=State Rare	2=Rare, Threatened or Endangered in CA but more common elsewhere
FPE=Federal Proposed Endangered	SC=Species of Concern	3=More information needed
FPT=Federal Proposed Threatened		4="Watch List"
FSC=Federal Species of Concern		

Furthermore, no sensitive biological species were identified during the reconnaissance level survey of the proposed substation site.

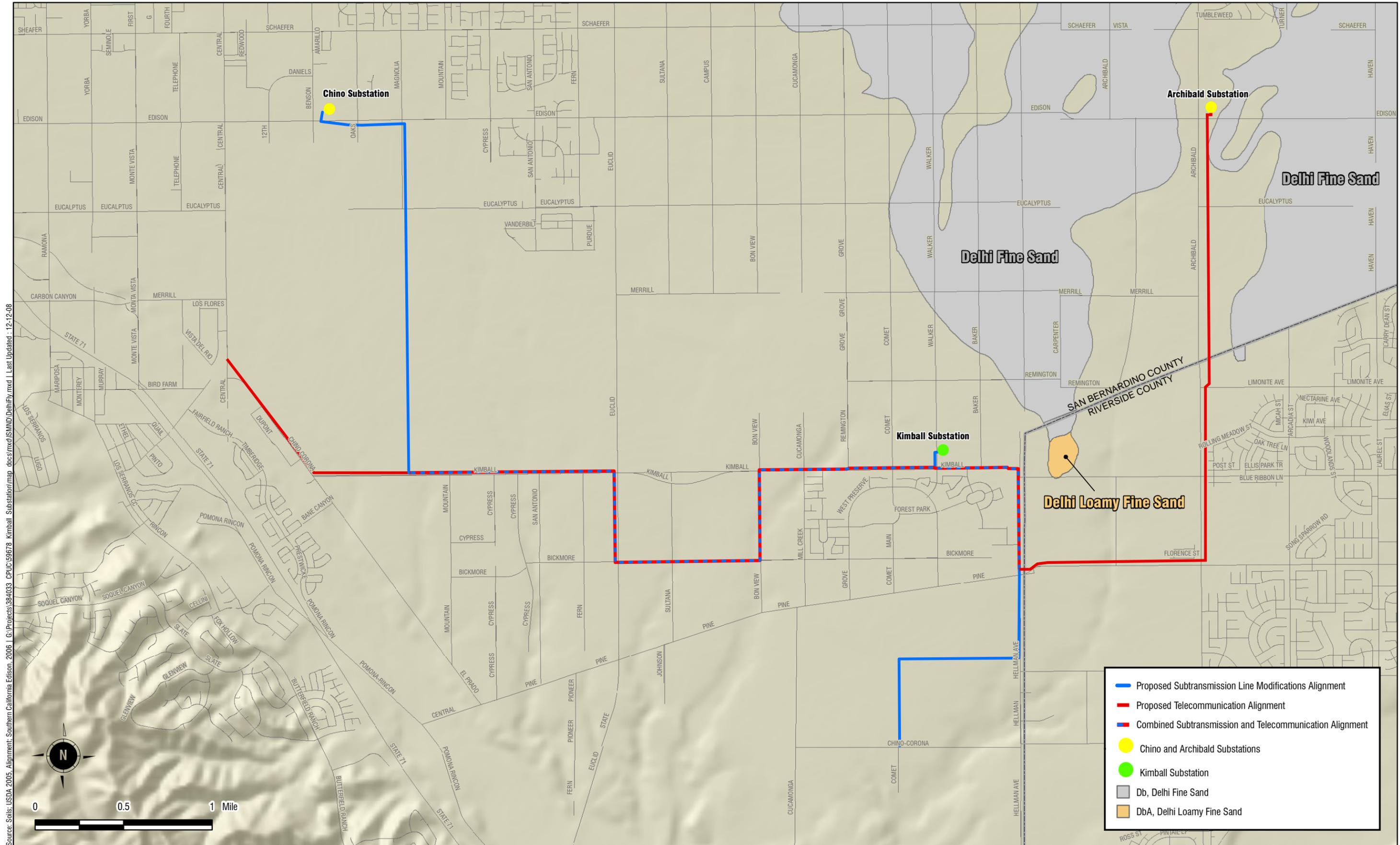
As previously discussed, the proposed substation site was evaluated by a permitted entomologist during the July 2005 biological survey to determine whether habitat for the DSF was present at the site. During the survey, no indicator plants or soils for the DSF were identified, as shown in Figure 2.4-1, Delhi Sands Fly Habitat. Therefore, it was determined that the proposed substation site does not contain suitable habitat for supporting populations of the DSF.

Additionally, the nine small walnut trees located on the proposed substation site provide suitable roosting and potential nesting habitat for raptors and migratory birds. Since nesting migratory birds are protected under the Migratory Bird Treaty Act, the removal of these trees could result in potentially significant impacts. However, the incorporation of Mitigation Measures Bio1 and Bio2 would reduce potential impacts to less than significant levels.

With mitigation, the development of the proposed substation would not have a substantial significant effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.

**Subtransmission and Telecommunication Alignments**

The May 2006 biological survey determined that the majority of the alignment of the proposed subtransmission line modifications lacked suitable habitat for sensitive plant and animal species because it parallels existing paved roads or bare ground surrounded by residential communities and disturbed agricultural areas. Vegetation along the alignment consisted of ruderal, overgrown, and disturbed and non-native species. Specifically, these vegetation communities were comprised of Russian thistle (*Salsola tragus*), black mustard (*Brassica nigra*), bull thistle (*Cirsium vulgare*), dandelion (*Taraxacum officinale*), and non-native grasses (*Bromus* spp.). The examination of the habitat along the alignment, relative to the habitat requirements for each of the species detailed in Table 2.4-1, indicates that the listed and sensitive species identified in the CNDDDB records searches do not have the potential to occur along the alignment with the exception of the burrowing owl (*Athene cunicularia*). Further, construction activities would take



Source: Soils: USDA 2005. Alignment: Southern California Edison. 2006 | G:\Projects\384033 CPUC\99678 Kimball Substation\map\_docs\mxd\SMND\DelhiFly.mxd | Last Updated: 12-12-08



place either within the roadway or shoulder of the roadway or within existing SCE easements, and, therefore, would not disturb additional areas outside of what was surveyed during the BRS.

According to the May 2006 biological survey, a portion of the alignment of the subtransmission line modifications, along Magnolia Avenue between the Chino Substation and Kimball Avenue, contained suitable foraging habitat for populations of the burrowing owl, a California Species of Special Concern. Furthermore, burrowing owls are known to occur in the project area according to the CNDDB records search. Although no burrowing owls were observed during the most recent field survey, the potential exists for construction activities to directly or indirectly impact this sensitive species. This represents a potentially significant impact. The incorporation of Mitigation Measure Bio3 would however reduce this impact to a less than significant level. No other native vegetation communities or sensitive biological species were identified during the reconnaissance-level survey of the alignment.

As shown in Figure 1.9-3, the telecommunication alignment would deviate from the existing Chino-Corona-Pedley 66 kV subtransmission line by turning east at Hellman Avenue into Riverside County and then north into the City of Ontario. The soils found along this portion of the alignment include: Chino silt loam (Cb), Chualar clay loam (CkC), Grangeville fine sandy loam (Gr), Hilmar loamy fine sand (Hr), and Hilmar loam very fine sand (HIA). These soils are not classified as DSF soils; therefore, the proposed telecommunication alignment does not contain suitable habitat for the DSF. Furthermore, Figure 2.4-1 shows that the proposed project does not traverse known DSF habitat.

Additionally, the existing wood transmission poles to be removed along the subtransmission alignment may provide suitable roosting habitat for raptors or contain active migratory bird nests. As previously discussed, all nesting migratory birds are protected under the Migratory Bird Treaty Act (MBTA). Therefore, the removal of these poles could result in potentially significant impacts. However, the incorporation of Mitigation Measures Bio1 and Bio2 would reduce potential impacts to raptors and nesting migratory birds to less than significant levels.

With mitigation, the subtransmission line modifications and telecommunication improvements would not have a significant effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS. A less than significant impact with mitigation incorporated has been identified for this issue area.

### **Mitigation**

**MM Bio1:** If construction activities are to occur during the nesting season (February 1 through August 31), a preconstruction survey shall be conducted by a qualified biologist at least one week prior to the commencement of construction activities to determine the presence/absence of active nests on the construction site. If an active nest is found, an adequate buffer of 300 feet shall be established around the nest and construction shall be prohibited within this designated area until the juveniles fledge. Construction buffers would only apply to the portion of the project site where the active nest is located. If vegetation or structures containing a raptor nest must be removed during the nesting season, or if work is scheduled to take place in close proximity to an active nest in vegetation or an existing structure, SCE would coordinate with the CDFG and USFWS and obtain written concurrence prior to moving the nest. Construction activities may continue within the project site if the activities take place outside of the designated buffer. (In practice, the presence of an active nest on the proposed substation site would halt construction of the substation because the buffer would incorporate the entire site;

however, an active nest located within the alignment would only halt construction within a specific portion of the alignment.)

**MM Bio2:** All new structures shall be designed to be raptor safe<sup>5</sup> in accordance with current standards and guidelines.

**MM Bio3:** A preconstruction burrowing owl survey shall be conducted no more than 30 days prior to the commencement of ground disturbing activities along the segment of the alignment that parallels Magnolia Avenue, between Edison and Kimball Avenues, to determine if any occupied burrows are present. If nesting pairs are found, adequate buffers shall be established around occupied burrows (50 meters (160 feet) from non-breeding burrows and 75 meters (250 feet) from breeding burrows) during the breeding season (February 1-August 31). If active burrows cannot be avoided, an appropriate relocation strategy would be developed in conjunction with the CDFG and may include: collapsing burrows outside of nesting season and the use of exclusionary devices to reduce impacts to the burrowing owl.

**b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? LESS THAN SIGNIFICANT IMPACT**

As previously discussed, the project site has been severely degraded by agriculture and development making it unsuitable for sensitive species. Specifically, the project site consists of disturbed, ruderal, non-native, and weedy vegetation. The project site does not contain riparian habitat or other sensitive natural communities. A less than significant impact has been identified for this issue area.

**c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means? NO IMPACT**

The October 2007 Biological Reconnaissance Survey conducted by HDR Engineering, Inc., identified two previously unrecorded drainage features in proximity to the project site that appear to be stormwater conveyances or irrigation ditches. The first drainage feature is located adjacent to the intersection of Edison Avenue and Magnolia Avenue and consists of an unlined and regularly maintained irrigation ditch with standing water. This feature is located approximately 15 feet from the existing Chino-Corona-Pedley 66 kV subtransmission line easement. Therefore, because construction activities would be confined to the easement, no impacts are anticipated.

The second drainage feature is located within a SCE utility easement adjacent to Edison Avenue immediately across from the Chino Substation. This feature appeared to be a dry, made-man irrigation ditch with a partly-lined cement bank. During the survey, no hydrophytic vegetation or hydric soils were observed. Furthermore, a review of the Prado Dam USGS 7.5 minute quadrangle determined that the irrigation ditch is not a natural drainage feature. Therefore, this drainage features does not fulfill the

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<sup>5</sup> The most common raptor safety features for utility power poles include installing protective covers over insulators and conductors, installing longer cross arms to separate conductors by 60 to 72 inches, changing jumper wire locations, and installing insulating covers on transformer wires and other transformer elements (HDR 2005).

criteria for identification as a federally-protected wetland. The project site contains no other riparian areas, including streams or watercourses.

The proposed telecommunication improvements would span Cucamonga Creek Channel along Schleisman Road; however, the telecommunication cable to be installed would be pulled<sup>6</sup> over the channel. Therefore, no impacts are anticipated. No impact has been identified for this issue area.

**d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? NO IMPACT**

As previously discussed, biological habitats and vegetation communities in much of the project area have been severely degraded by decades of agricultural practices. Moreover, these habitats and communities are undergoing further degradation as the project area transitions from primarily agricultural to residential, commercial, and industrial uses. Additionally, the nearest functioning wildlife corridor is located within the Prado Basin, approximately 5 miles from the project area (pers. comm. Johanna Page, SCE). Therefore, due to the extensive presence of agriculture and developing residential uses in the project area and the proposed project's distance from the nearest established wildlife corridor, it is unlikely that established native resident or migratory wildlife corridors exist. No impact has been identified for this issue area.

**e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION**

The proposed project spans both San Bernardino and Riverside Counties. San Bernardino County provides regulations to promote conservation and wise use of both native and palm tree resources in the valley region (Mountain Forest and Valley Tree Conservation Code 88.01.070). Riverside County Ordinance No. 599 regulates the removal of native trees.

At the proposed substation site, approximately nine small walnut trees would be removed and discarded. During construction, SCE shall adhere to all City of Chino requirements concerning the removal of trees. Further, no trees would be removed along the alignment of the proposed subtransmission line modification or the proposed telecommunication improvements. Therefore, construction of the proposed project would not conflict with these two tree preservation policies. With the incorporation of Mitigation Measures Bio1 through Bio3, a less than significant impact has been identified for this issue area.

**f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

The proposed substation site and the alignment of the subtransmission modifications are located within San Bernardino County, which does not have an adopted Multiple Species Habitat Conservation Plan (MSHCP). Therefore, no conflicts with the provisions of an adopted Habitat Conservation Plan (HCP) would exist for construction activities associated with these project components.

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<sup>6</sup> Two electrical trucks would be employed to pull the cable over the channel. A truck with a cable reel would be stationed on one side of the channel while a truck with a winch would be stationed on the other side. The cable would be pulled onto the poles with pull rope and then permanently secured to the poles.

A portion of the alignment of the telecommunication improvements is located within Riverside County, which is included in the Western Riverside County MSHCP. However, this portion of the alignment is not located within any MSHCP Cell Groups or existing or proposed special linkage areas. It is also not located within or adjacent to any MSHCP Reserve lands, nor is it located within a Narrow Endemic Plant Species Survey Area. Therefore, this component of the proposed project would be consistent with MSHCP Section 6.1.3. Section 6.1.2 of the MSHCP focuses on protection of Riparian/Riverine areas and vernal pool habitat types. There are no Riparian/Riverine areas or vernal pools along this portion of the alignment. It is also outside of any Criteria Area Species Survey Areas for plants, amphibians and mammals; however, it is located within a western burrowing owl survey area. In order to maintain consistency with MSHCP Section 6.1.2, a focused burrowing owl survey would be required prior to the commencement of construction activities along this portion of the telecommunication alignment, as required in Mitigation Measure Bio3. Should burrowing owls be found, adequate buffers in compliance with MBTA Guidelines would be required if construction were to take place during the breeding season.

Upon implementation of Mitigation Measure Bio 3, construction along this portion of the alignment would not conflict with the provisions of an adopted HCP, Natural Communities Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. Therefore, a less than significant impact with mitigation incorporated is associated with this issue.

## 2.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES:</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cultural resources are defined as places, structures, or objects that are important for scientific, historic, and/or religious reasons to cultures, communities, groups, or individuals. Cultural resources include historic and prehistoric archaeological sites, architectural remains, engineering structures, and artifacts that provide evidence of past human activity. They also include places, resources, or items of importance in the traditions of societies and religions.

Paleontological resources are defined as any remains, traces, or imprints of a plant or animal that has been preserved in the earth's crust since some past geologic time. Examples of paleontological resources include invertebrate fossils, microfossils, petrified wood, plants, tract, and vertebrate fossils.

## 2.5.1 Setting

### **Ethnography**

The proposed project is located within the traditional boundaries of the Gabrielino Indians, a Takic-speaking people whose territory extended from the high peaks of the San Gabriel Mountains to the Pacific Coast and offshore islands (Bean and Smith 1978; McCawley 1996). Their territory was bordered to the north by the Transverse Ranges and to the south by the Santa Ana Mountains. The Gabrielino homeland, most of which was below 1,000 feet in elevation, covered more than 1,500 square miles of coastal and inland southern California (McCawley 1996). The Gabrielino were hunters and gatherers who utilized both large and small game as well as numerous plant resources. Gabrielino settlement patterns consisted of permanent villages located in proximity to reliable sources of water and food. Two Gabrielino villages were known to exist in the Chino area (McCawley 1996).

### **Methodology**

An archaeological survey was conducted for the proposed substation site (Pollack and Lerch 2005) (Appendix D). The survey included a records search, literature review and pedestrian field survey of the approximately two-acre site. The study area for the records search included a one-mile radius around the proposed substation site, and included a review of previously recorded cultural resources and survey areas; historical maps and archival documents; and local, state, and federal lists of recognized archaeological and historical resources. The records search was conducted by using the California Historical Resources Information System (CHRIS) at the San Bernardino County Archaeological Information Center (AIC), San Bernardino County Museum in Redlands, California; and the CHRIS Eastern Information Center, Department of Anthropology, University of California, Riverside, on July 27, 2005. The pedestrian field survey was conducted on July 28, 2005 by walking parallel transects spaced approximately 15 meters apart. Vegetation was minimal and ground visibility was excellent during the survey.

## 2.5.2 Environmental Impacts and Mitigation Measures

- a. Would the project cause a substantial adverse change in the significance of an historical resource as defined in §15064.5? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

According to the project archeological survey, no historical sites or resources are known to exist on the proposed substation site. A garden shack was observed during the field survey immediately adjacent to the southern boundary of the site. According to the archaeologist who prepared the Archaeological Survey for the proposed project, the garden shack with three impaired walls would not be eligible for listing as a historic resource due to its current state of deterioration.

### **Subtransmission and Telecommunication Alignments**

The proposed above ground modifications to the Chino-Corona-Pedley and Archibald-Chino-Corona subtransmission lines would take place entirely within existing SCE utility easements. Subsurface construction activities associated with the proposed modifications would include bore holes for the LWS, an approximate 9-foot wide by 40-foot deep bore hole for the TSP riser, the excavation of a 2-foot wide by 5-foot deep trench for the underground conduits, and the installation of a vault 3 feet below grade

north of the TSP riser (along Flight Street). The exact extent and location of the LWS bore holes remains unknown.

Ground disturbing activities associated with the proposed telecommunication improvements include an approximate 18-inch wide by 36-inch deep trench at the proposed (Kimball) and existing (Archibald) substations; and an approximate 250-foot long by 7-inch wide hole, bookend by two 7-foot by 10-foot wide by 7-foot deep bore holes, along Archibald Avenue where the telecommunication alignment crosses an SCE 500kV transmission line corridor.

Given the long history of agricultural production in the region, the soils in the project area have likely been previously disturbed by agricultural practices. Therefore, it is unlikely that undiscovered historic resources exist at the proposed substation site or along the subtransmission and telecommunication alignments (SCE 2006). A less than significant impact has been identified for this issue area.

**b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

### **Substation**

According to the archeological survey (Pollock 2005), no archaeological resources are known to exist on the proposed substation site, and no prehistoric or historical-period cultural resources were identified during the pedestrian field survey. Subsurface construction activities associated with the proposed substation would include the removal of approximately 1,500 cubic yards of topsoil, the excavation of a 2-foot wide by 5-foot deep trench for the underground conduits, and the installation of a vault 3 feet below grade.

### **Subtransmission and Telecommunication Alignments**

As outlined above, soils in the project area have likely been previously disturbed by agricultural practices given the long history of agricultural production in the region. Therefore, it is unlikely that undiscovered archaeological resources exist at the proposed substation site or along the subtransmission and telecommunication alignments (SCE 2006). However, because the potential for uncovering previously identified archaeological resources exists, Mitigation Measure Cull1 is required to reduce impacts to below a level of significance.

### **Mitigation**

**MM Cull1:** In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and SCE and/or the CPUC shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of SCE and/or the CPUC and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, as necessary and a report prepared by a Specialist according to current professional standards.

In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeologist resources, the CPUC shall determine whether avoidance is necessary and feasible in light of factors

such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g. data recovery) shall be instituted. Work may proceed on other parts of the proposed project site while mitigation for historical resources of unique archaeological resources is carried out.

If the CPUC, in consultation with the qualified archaeologist, determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, the CPUC shall require SCE to:

- Redesign the proposed project to avoid any adverse effect on the significant archeological resource; or
- Implement an archeological data recovery program (ADRP) unless the qualified archaeologist determines that the archeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

**c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? LESS THAN SIGNIFICANT IMPACT**

The proposed substation site lies on recent alluvium (Rogers 1965). This type of geological material has a low sensitivity for paleontological resources. As mentioned above, both the proposed subtransmission line modifications and to a lesser extent, the telecommunication improvements involve subsurface excavation. According to Kathleen Springer, a paleontologist at the San Bernardino Museum of Natural History, the project area is deemed to have a low paleontological sensitivity. Therefore, it is not anticipated that the construction of the proposed project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. A less than significant impact has been identified for this issue area.

**d. Would the project disturb any human remains, including those interred outside of formal cemeteries? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Human remains were not identified within the proposed substation site during the pedestrian field survey. Given the long history of agricultural production in the region, the soils in the project area have likely been previously disturbed by agricultural practices. It is unlikely that human remains exist at the proposed substation site or along the subtransmission and telecommunication alignments. However, if construction activities associated with the proposed project result in accidental discovery of human remains, Mitigation Measure Cul2 would reduce impacts to below a level of significance.

**Mitigation**

**MM Cul2:** If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 dictates that no further disturbance would occur until the County Coroner has made the necessary findings as to origin and disposition of the remains pursuant to Public Resources Code Section 5097.98.

Should human remains be identified as a Native American burial, the Native American Heritage Commission shall be contacted to determine the appropriate repatriation efforts.

**2.6 GEOLOGY AND SOILS**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VI. GEOLOGY AND SOILS:</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2.6.1 Setting

The project area lies within the geologically active Southern California region, which is subject to earthquakes of varying magnitudes. The region has experienced major earthquakes including the San Fernando earthquake of 1971 and the Northridge earthquake of 1994. Earthquakes can result in hazards such as landslides and liquefaction, in addition to damage from shaking, which can damage property and infrastructure.

According to the United States Geological Survey, there are two active faults in the region: the Chino Fault and the Central Avenue Fault (CDC 2006 and CGS 2005). The faults run roughly south-east to north-west and are found on the western edge of the City of Chino and just to the west in the City of Chino Hills as shown in Figure 2.6-1, Regional Fault Map.

The project area lies within the Peninsular Range geomorphic province, which is characterized by sloping alluvial basins separated by northwest/southeast trending mountains (GeoTrans 2005). The valleys of the region are underlain by thick sequences of eroded materials from the surrounding mountains. The eroded materials fill deep structural depressions. Alluvial materials consist of gravel, sand, silt, and clay ranging in thickness from one to several thousand feet thick. Groundwater depth was last measured on September 3, 2003, with an approximate depth of 96 feet below ground surface from a state well located approximately 0.1 miles from the proposed substation site (GeoTrans 2005). Surface topography in the project area is generally flat with a slight slope to the south.

## 2.6.2 Environmental Impacts and Mitigation Measures

### a. **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

#### i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? LESS THAN SIGNIFICANT IMPACT**

The State Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting. According to the California Department of Conservation, California Geological Survey, the cities of Chino and Ontario are not listed as being affected by Alquist-Priolo earthquake fault zones (2006).

Furthermore, no known active faults traverse the project site. As previously stated, the nearest active fault to the project site is the north/northwest striking Chino Fault, which is located approximately five miles to the southwest. Therefore, the hazard of direct surface displacement by faulting along any portion of the project site would be minimal. A less than significant impact has been identified for this issue area.

#### ii) **Strong seismic ground shaking? LESS THAN SIGNIFICANT IMPACT**

Severe ground shaking from earthquakes originating on nearby faults presents the primary geologic hazard relative to development in the project site. However, given that the project site is not located in a designated Alquist-Priolo earthquake fault zone, it can be concluded that the proposed project would not be more susceptible to ground shaking than other areas in seismically

active Southern California. Compliance with mandatory earthquake design and construction standards would ensure that potentially significant impacts related to seismic activity would be minimized. Specifically, the electrical equipment associated with the proposed substation would be constructed in accordance with the Institute of Electrical and Electronics Engineers (IEEE) *Recommended Practices for Seismic Design of Substations*. Incorporation of these guidelines would ensure that project impacts associated with strong seismic ground shaking would be less than significant.

**iii) Seismic-related ground failure, including liquefaction? LESS THAN SIGNIFICANT IMPACT**

Liquefaction occurs primarily in saturated, loose, fine-to medium-grained soils in areas where the groundwater table is within approximately 50 feet of the surface. Shaking causes the soils to lose strength and behave as liquid. Excess water pressure is vented upward through fissures and soil cracks, and a water-soil slurry bubbles onto the ground surface. Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and flow failures or slumping. Site-specific geotechnical studies are the only practical and reliable way of determining the specific liquefaction potential of a site; however, a determination of general risk potential can be provided based on soil type and depth of groundwater.

**Substation**

According to a Phase I Environmental Site Assessment conducted by GeoTrans in October 2005 for the proposed substation site, the depth to groundwater was approximately 95 feet and considered to be “moderately deep”. Liquefaction hazards may exist in areas where depth to groundwater is 40 feet or less (California Division of Mines & Geology 2007). Deep groundwater zones (>50 feet) are typically associated with having a low to very low liquefaction potential.

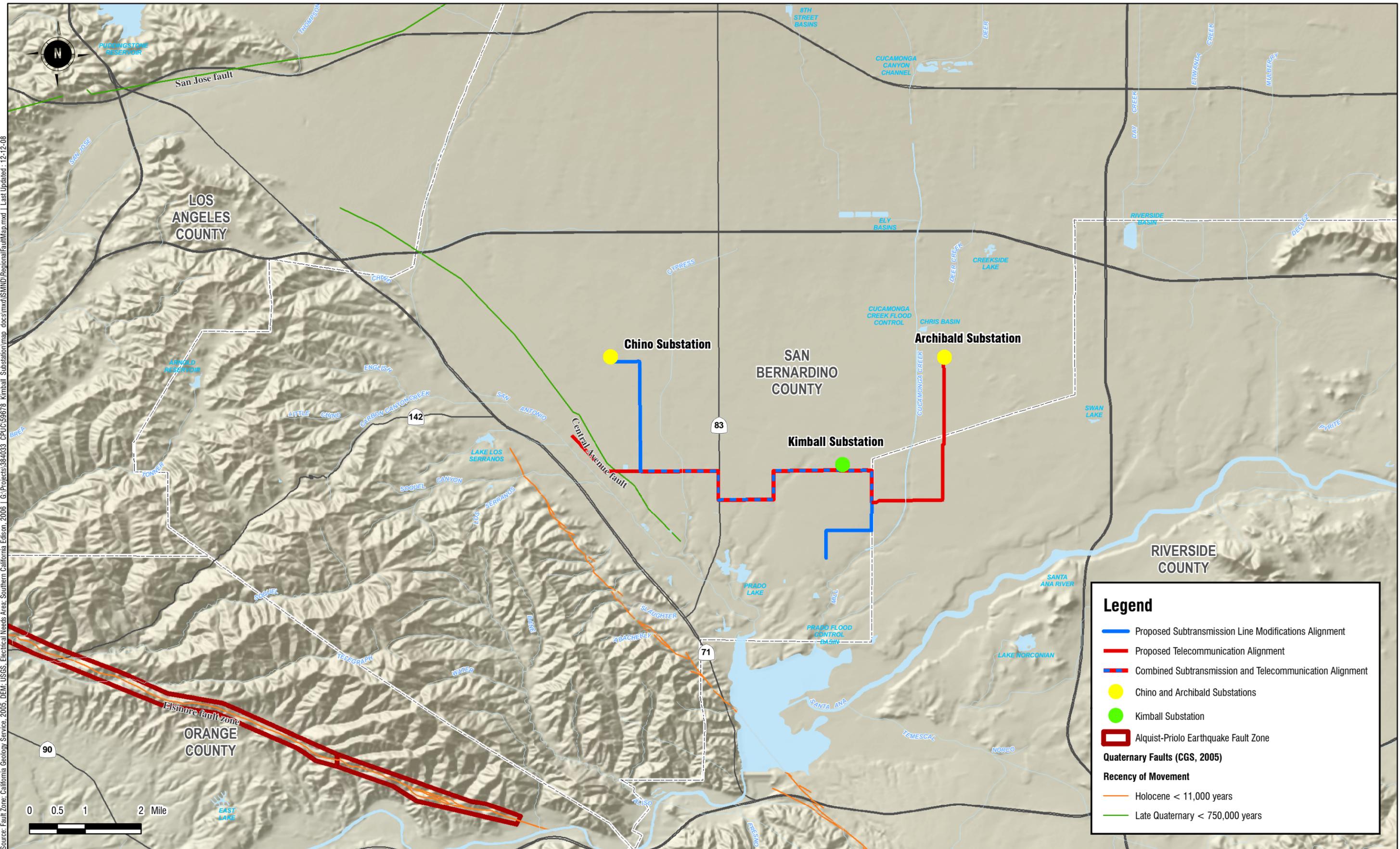
**Subtransmission and Telecommunication Alignments**

According to the City of Chino’s 2006 Existing Conditions Report, no liquefaction areas exist within in the City of Chino or its sphere of influence, which encompasses the alignment of the proposed subtransmission line modification. However, Exhibit 5.5-2 in The Preserve Specific Plan Environmental Impact Report shows a segment of the alignment (along Hellman Avenue) in a moderate potential liquefaction hazard zone. Due to deep groundwater depth in the project area, there is a very low potential for liquefaction of soils during ground shaking events. Construction and operation of the proposed subtransmission line modifications within this low to moderate potential liquefaction hazard zone would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death (SCE 2006).

A portion of the telecommunication alignment would take place within the portion of the City of Ontario known as “the New Model Colony.” The New Model Colony General Plan shows a low to moderate liquefaction potential for this area.

The remaining portion of the telecommunication alignment is located in western Riverside County in an area considered as having a high susceptibility to liquefaction. However, site grading and typical compaction requirements dictated during subsurface construction activities associated with the proposed project (e.g., boring of holes for the LWS poles; burying of underground conductor; and TSP riser and vault installation) would reduce the potential for

Source: Fault Zone: California Geology Service, 2005, DEM: USGS, Electrical Needs Area: Southern California Edison, 2006 | G:\Projects\384033 CPUC\59678 Kimball Substation\map docs\mxd\SMND\RegionalFaultMap.mxd | Last Updated: 12-12-08



**Legend**

- Proposed Subtransmission Line Modifications Alignment
- Proposed Telecommunication Alignment
- Combined Subtransmission and Telecommunication Alignment
- Chino and Archibald Substations
- Kimball Substation
- Alquist-Priolo Earthquake Fault Zone

**Quaternary Faults (CGS, 2005)**

**Recency of Movement**

- Holocene < 11,000 years
- Late Quaternary < 750,000 years

**Regional Fault Map**  
FIGURE 2.6-1



liquefaction. In addition, the proposed project would comply with all mandatory earthquake design and construction standards to ensure that impacts from seismic related ground failure, including liquefaction are minimized. Impacts would be less than significant.

**iv) Landslides? NO IMPACT**

The topography of the proposed substation site is generally flat but construction would require a certain amount of grading. Although preparation of the site would include the removal of approximately 1,500 cubic yards of topsoil and the importation of fill material, it would not result in the creation of man-made slopes or other conditions that could create a potential hazard for landslides. The topography along the subtransmission and telecommunication alignments is also generally flat. As such, the subtransmission line modifications and telecommunication improvements (including their construction) would not result in the creation of any man-made slopes or other conditions that could create a potential hazard for landslides.

Given the generally level topography of the project area, the potential for landslides or other slope stability concerns resulting from the construction of the proposed project is minimal. No impact has been identified for this issue area.

**b. Would the project result in substantial soil erosion or the loss of topsoil? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

**Substation**

Soil erosion can result during construction, as grading and other construction activities can loosen surface soils, making them susceptible to the effects of wind and water movement across the soil surface. The proposed substation site consists of Hilmar loamy fine sand (Hr) (Figure 2.6-2, Soils Map). The erosion hazard potential for this soil type is low (Knecht 1971).

As outlined above, construction of the proposed substation would require the removal of approximately 1,500 cubic yards of topsoil and the importation of fill material. However, the implementation of appropriate erosion control measures, utilizing best management practices (BMPs), would avoid or minimize soil erosion and off-site deposition. Additionally, the estimated level of soil disturbance would be greater than one acre; therefore, Mitigation Measure Geo1 is required to reduce impacts associated with soil erosion and loss of topsoil to below a level of significance.

**Subtransmission and Telecommunication Alignments**

Soils located along the subtransmission and telecommunication alignments predominately include Chino silt loam (Cb), Merrill silt loam (Me), Hilmar loamy fine sand (Hr), Chualar clay loam (CkA), and Hilmar loam very fine sand (HIA) (Figure 2.6-2). The overall erosion hazard potential for these soils is considered to be low (Knecht 1971).

As outlined above, the topography along the subtransmission and telecommunication alignments is relatively flat. The subtransmission line modifications and telecommunication improvements (including their construction) would not result in grade or elevation changes, which can expose soils to wind and water movement and lead to erosion. The boring of holes for the new LWS poles along the alignment of the proposed subtransmission line modifications would produce minor quantities of excavated soil. The implementation of standard erosion control measures outlined in the NPDES permit and SWPPP required by Mitigation Measure Geo1 would be required during surface and subsurface construction activities

associated with the subtransmission and telecommunication alignments (e.g., grading, boring of holes for the LWS poles; burying of underground conductors; and TSP riser and vault installation) to reduce the erosion potential of the minor quantities of excavated soil. Therefore, substantial soil erosion impacts would be less than significant with mitigation incorporated.

### **Mitigation**

**MM Geo1:** The applicant shall obtain a National Pollutant Discharge Elimination System (NPDES) permit and prepare a Storm Water Pollution Prevention Plan (SWPPP) which meets the requirements of the Santa Ana Regional Water Quality Control Board. Specific erosion control measures would be outlined in the NPDES permit and SWPPP and would be required to be in place prior to the commencement of grading activities.

The standard erosion control measures outlined in the NPDES permit and SWPPP would be required during surface and subsurface construction activities associated with the subtransmission and telecommunication alignments (e.g., grading, boring of holes for the LWS poles; burying of underground conductors; and TSP riser and vault installation) would reduce the erosion potential of the minor quantities of excavated soil.

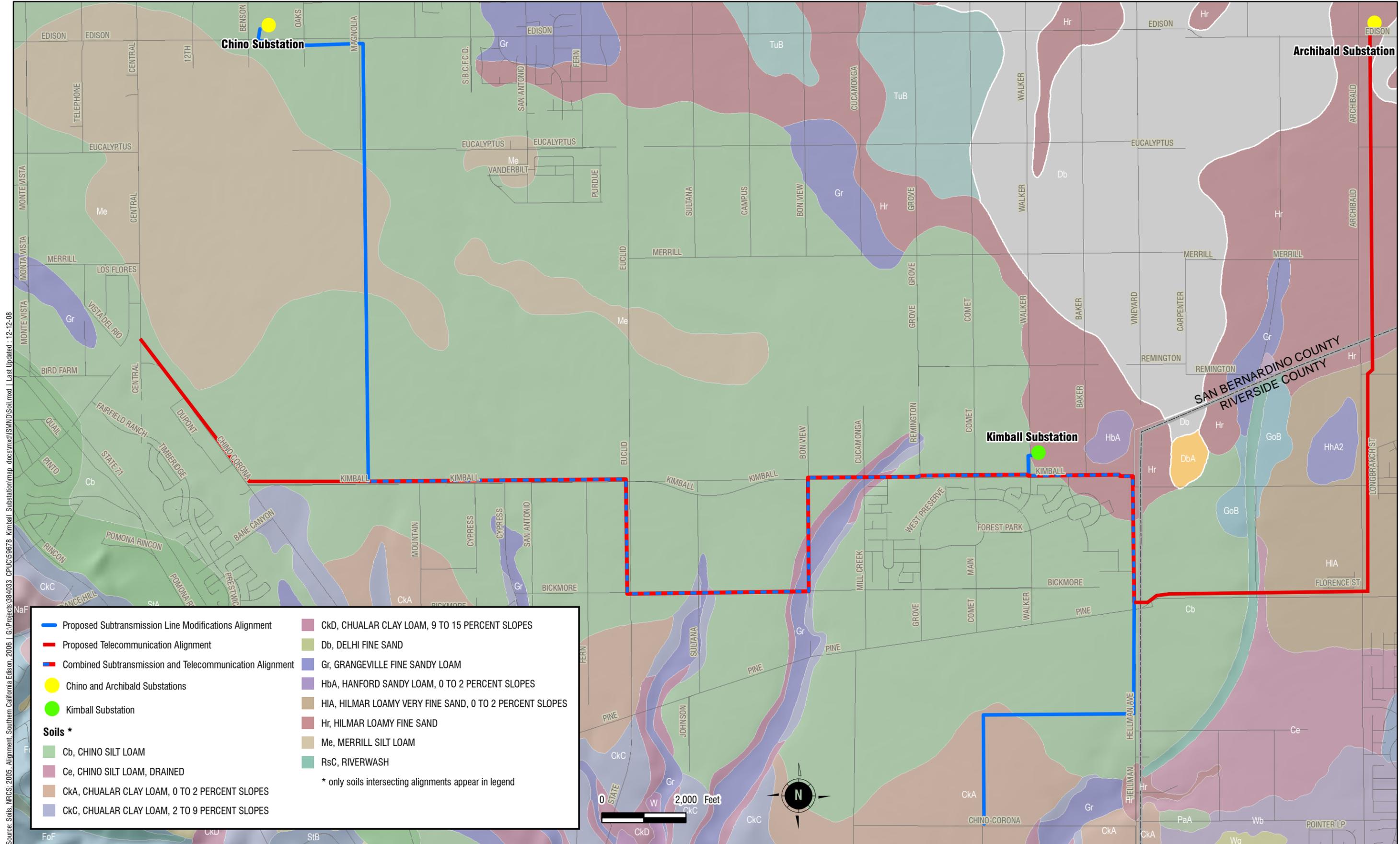
The permit shall be required prior to construction and submitted to the CPUC.

**c. Would the project be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? LESS THAN SIGNIFICANT IMPACT**

The counties of San Bernardino and Riverside contain a variety of topographical and geological conditions that pose various slope and soil instability hazards. Landslides, lateral spreading, subsidence, liquefaction, or collapse are associated with mountainous regions primarily composed of igneous and metamorphic rock. Specifically, subsidence refers to the sudden sinking or gradual downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence can result from human and natural activities, including earthquakes.

The potential for unstable geologic conditions at the project site is considered relatively low due to the generally flat topography of the project area. According to the City of Chino General Plan and the Ontario new Model Colony General Plan, historic landslides have not taken place in the project area. According to the Eastvale Specific plan, the localized seismic hazard potential within the portion of the telecommunication alignment within Riverside County is considered relatively low.

As outlined above, the potential for lateral spreading and subsidence (which often occur under similar conditions as liquefaction) in the project area is considered low to moderate for the majority of the project area. The portion of the telecommunication alignment within Riverside County, due to the proximity of the Santa Ana River, has a higher liquefaction potential, primarily from shallower groundwater levels and relatively fine soil compositions. The proposed project would also comply with all applicable construction standards to ensure that impacts related to seismic hazards or ground failure would be minimized. A less than significant impact has been identified for this issue area.



Source: Soils, NRCS, 2005, Alignment, Southern California Edison, 2006 | G:\Projects\384033\_CPUC\59678\_Kimball\_Substation\map\_docs\sm\ISMND\Soils.mxd | Last Updated: 12-12-08



**d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? LESS THAN SIGNIFICANT IMPACT**

Expansive soils have a significant amount of clay particles which can give up water (shrink) or take on water (swell). The change in volume can exert stress on infrastructure placed on these soils. The occurrence of these soils is often associated with geologic units having marginal stability.

Soils within the project area primarily consist of silt loams or fine sands, as shown in Figure 2.6-2. These soils have a low shrink-swell potential because their clay content is low. In addition, the grading plan for the proposed substation and the subsurface construction activities associated with the subtransmission modifications and telecommunication improvements would include specifications (e.g., replacement of expansive soils with suitable fill material) that would ensure that the risk to the proposed project from expansive soils would not be substantial. Therefore, a less than significant impact has been identified for this issue area.

**e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? NO IMPACT**

The project does not propose the use of septic tanks or alternative wastewater disposal systems. No impact has been identified for this issue area.

**2.7 HAZARDS AND HAZARDOUS MATERIALS**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VII. HAZARDS AND HAZARDOUS MATERIALS:</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 2.7.1 Setting

Hazardous materials are classified as those that include solids, liquids, or gaseous materials that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, could pose a threat to human health or the environment. Hazards include the risks associated with potential explosions, fires, or release of hazardous substances in the event of an accident or natural disaster, which may cause or contribute to an increase in mortality or serious illness, or pose substantial harm to human health or the environment.

Land uses in the project area that have the potential for creating safety hazards and/or may contain hazardous materials can be described as predominantly agricultural with some industrial influences. Specifically, industrial and commercial areas surround Chino Substation to the north, east and west. Land uses surrounding the proposed substation site include agricultural (primarily dairy) and residential uses. A portion of the alignment of the subtransmission line modifications passes through agricultural lands within the western boundaries of the Chino State Prison and adjacent to recently constructed industrial and commercial developments east of Euclid Avenue. To the west of Euclid Avenue, the alignment runs adjacent to agricultural lands, primarily older, smaller dairy farms, before passing through the newer residential areas of The Preserve, a large partially complete residential community located along Mill Creek and Kimball Avenue, south of the proposed substation. Within 0.25 miles of the subtransmission line, a portion of The Preserve has as Community Core (CC) land use designation, which allows for school use. Chino Airport is located approximately 0.3 miles west/northwest of the proposed substation site. The airport is operated by the County of San Bernardino and, in addition to serving the County, is designated to provide congestion relief to larger airports such as John Wayne Airport and Ontario Airport.

In addition, the proposed project is not located within a wildland fire hazard zone, according to the State of California’s Department of Forestry and Fire Protection Fire and Resource Assessment.

#### Substation

A Phase I Environmental Site Assessment (ESA) was performed by GeoTrans in October 2005 to identify and evaluate environmental conditions at the proposed substation site and to provide an interpretation on the nature of environmental risk or liability that may be present if the site is developed. According to the ESA, the following conditions were observed at the site:

- Eleven 55-gallon drums were observed at the site. The prior property owner (Mrs. Margaret Brinkerhoff) indicated that the drums had been at the site since 1965 and originally contained gasoline. During the site visit, the drums were either unsealed and exposed to the environment or covered and partially filled with rainwater. cursory observations lead to the determination that there is a high probability that the fuel originally contained in the drums has been released into the surrounding soil.
- The site formed part of a walnut grove prior to 1948. Therefore, there is the possibility that pesticides and metals associated with the past walnut grove are present in the soils at the site.
- Livestock was present at the site approximately 30 years ago. As a result, there is the possibility that nitrates, a known potable water contaminant found in animal waste, are present in the soils at the site.
- According to an environmental records search of a California Department of Toxic Substances Control (DTSC)-maintained database, a site less than 0.5 miles from the proposed substation site has been identified as having the potential to contain pesticides and other chemicals of concern. Contaminated groundwater from this site may have impacted groundwater underneath the proposed substation site.

Based on the evidence compiled during the Phase I ESA, a limited Phase II ESA consisting of a soil and groundwater investigation of the proposed substation site was performed by GeoTrans on March 11, 2005. The Phase II ESA analysis yielded the following results:

- The soil beneath the 55-gallon drums had not been impacted by fuel or fuel-related metals.
- The soil had not been impacted by the use of pesticides.
- Nitrate was detected in concentrations above acceptable levels for drinking water from a groundwater sample taken from the proposed substation site. However, it was deemed likely that the source of this nitrate was from historical dairy farming activities within the region, and not from the DTSC-flagged site. Furthermore, the concentration was found to be consistent with regional background levels. (It should be noted that the presence of nitrate in groundwater has been a regional problem in the Chino Basin.)

Surface and subsurface construction activities associated with the proposed subtransmission modifications and telecommunication improvements include: grading, the boring of holes for the LWS poles, the burying of underground conductors, and the installation of the TSP riser and vaults. These activities would result in minor quantities of excavated soil.

### 2.7.2 Environmental Impacts and Mitigation Measures

**a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Operation and maintenance of the proposed project would involve the periodic and routine transport, use, and disposal of minor amounts of hazardous materials, primarily petroleum products (lubricating and insulating oils). Batteries associated with the proposed substation would be properly stored to prevent the release of battery acid in the event of a leak or rupture. Proper handling of these materials would avoid any significant hazards to the public or the environment.

Further, the design of the proposed substation would provide containment and/or diversionary structures or equipment to prevent the discharge of oil or other hazardous material as required by Mitigation Measure Haz1. These features would be included as part of the Spill Prevention Control and Countermeasure (SPCC) requirements (40 Code of Federal Regulations (CFR) Part 112.1 through Part 112.7) that would be prepared by SCE prior to construction of the substation (SCE 2006) and submitted to the CPUC. With incorporation of Mitigation Measure Haz1, impacts associated with the potential release of hazardous materials would be reduced to below a level of significance.

Hazardous or flammable materials used during construction would consist primarily of vehicle fuels (gasoline and diesel), oil, grease, and other fluids (hydraulic fluid, antifreeze, and transmission fluid) associated with construction equipment. Liquid concrete would also be used during construction. To avoid the inadvertent release of these materials (and to ensure proper response protocols), SCE would be required to implement environmental training for its field personnel. Hazardous materials such as the hydrocarbons that fill the transformers would be stored, handled, and disposed of in accordance with local ordinances and state and federal regulatory requirements to reduce the risk of accidental spills. After construction, all hazardous materials would be removed from the site. With these measures in place, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. A less than significant impact has been identified for this issue area.

### **Mitigation**

**MM Haz1:** The design of the proposed substation shall provide containment and/or diversionary structures or equipment to prevent the discharge of oil or other hazardous material. These features shall be included as part of the Spill Prevention Control and Countermeasure (SPCC) requirements (40 Code of Federal Regulations (CFR) Part 112.1 through Part 112.7) that would be prepared by SCE prior to construction of the substation and submitted to the CPUC.

**b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

As described above, the proposed measures required under Mitigation Measure Haz1 for spill prevention and hazardous substance control would reduce potential impacts from upset or accidental spills of hazardous materials to less than significant levels.

**c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? NO IMPACT**

### **Substation**

The proposed substation site is not located within one-quarter mile of an existing or proposed school. No impact has been identified for this issue area.

## **Subtransmission and Telecommunication Alignments**

The proposed improvements to the subtransmission and telecommunication alignments are not located within one-quarter mile of an existing or proposed school. No impact has been identified for this issue area.

- d. Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

## **Substation**

The proposed substation site is not located on a site listed on a government database. As previously stated, an environmental records search of a DTSC-maintained database identified a site less than 0.5 miles from the proposed substation site as having the potential to contain pesticides and/or other chemicals of concern. According to the records search, contaminated groundwater from this site may have impacted groundwater underneath the proposed substation site. According to the Phase II ESA conducted in response to this concern, the origin of the contamination was determined to be from historical dairy farming activities, and not from the DTSC-flagged site. The concentration was found to be consistent with regional background levels, and it was determined that the contaminated site would pose no hazard to the proposed substation site.

## **Subtransmission and Telecommunication Alignments**

Contaminated soil may be encountered during excavation activities along the subtransmission and/or telecommunication alignments. Additionally, the wooden poles that would be removed as part of the subtransmission line modifications may result in impacts associated with hazardous materials. Therefore, a significant impact has been identified for this issue area.

Mitigation Measure Haz2 requires that the soil be segregated and tested to determine the appropriate disposal and treatment options. Should a soil test positive for hazardous materials, the soil would be properly transported to a Class I landfill or other appropriate soil treatment or recycling facility (SCE 2006).

Mitigation Measure Haz2 also requires that the wooden poles that would be removed as part of the subtransmission line modifications be either returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a Regional Water Quality Control Board (RWQCB)-approved municipal landfill. Adherence to this Mitigation Measure would ensure that the proposed project would not create a significant hazard to the public or the environment. A less than significant impact with mitigation incorporated has been identified for this issue area.

## **Mitigation**

- MM Haz2:** In the event that contaminated soil is encountered during excavation activities along the subtransmission and/or telecommunication alignments, the soil shall be segregated and tested to determine the appropriate disposal and treatment options. Should a soil test positive for hazardous materials, the soil shall be properly transported to a Class I landfill or other appropriate soil treatment or recycling facility.

The wooden poles to be removed as part of the subtransmission line modifications shall be either returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a Regional Water Quality Control Board (RWQCB)-approved municipal landfill.

**e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

The County-operated Chino Airport is located on land zoned for airport-related development the proposed substation site and 0.2 miles north of the closest portion of the subtransmission line. The airport's two approach and take-off zones are oriented west to east and southwest to northeast, which places flight paths over the proposed substation site and portions of the alignment of the subtransmission line modifications and telecommunication improvements.

### **Substation**

Upon completion, the substation would have a maximum height of 17 feet, while construction of the substation would require equipment exceeding 20 feet in height. Given the site's proximity to the end of one of the airport's runways (approximately 1,600 feet north/northwest of the proposed substation site), the Federal Aviation Administration (FAA) would require notification per Federal Aviation Rule (FAR) 77.11<sup>7</sup>. At this distance, permanent structures up to approximately 41<sup>8</sup> feet would not however interfere with airport operation, according to FAR 77.11 guidelines. During construction, cranes to be used may be near or taller than 72 feet. Implementation of Mitigation Measure Haz3 during construction of the proposed substation would reduce potential short-term obstruction impacts. Therefore, the construction and operation of the proposed substation would not result in a safety hazard for people residing or working in the project area. Impacts would be mitigated to less than significant.

### **Subtransmission and Telecommunication Alignments**

A portion of the alignment of the subtransmission modifications is located within the airport's southwest-to northeast-oriented take-off zone, approximately 2,650 feet from the end of the runway. Per FAR 77.11, the FAA would require notification for proposed structures exceeding 27<sup>9</sup> feet in height at this distance. Given that the LWS poles to be installed along this portion of the alignment would have a maximum height of 65 feet, FAA notification (Haz2) would be required. According to FAR 77.11 guidelines,

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<sup>7</sup> FAR 77.11 established criteria for height restrictions in the vicinity of airports. FAR 77.11 regulations require FAA notification for all existing or proposed structures entering into an imaginary planar surface created by extending one vertical foot for every 100 horizontal feet in a 20,000-foot radius surrounding the end of a runway. At a distance of approximately 1,600 feet from the closest runway, structures at the proposed substation site would break the imaginary plane surface notification height at 16 feet (1,600 ft/ 100 ft = 16 ft).

<sup>8</sup> According to FAR 77.11 guidelines, temporary or permanent structures are prohibited in the area extending 150 feet upward from the established airport elevation and 10,000 feet outward from the center of a 200-foot imaginary planer surface extension from the end of the runway. Additionally, objects are restricted in the airspace extending one vertical foot upward for every 34 horizontal feet outward from the center of the imaginary planer surface extension. At a distance of approximately 1,600 feet from the closest runway, structures at the proposed substation would violate FAA obstruction standards at a height of approximately 41 feet ((1,600 ft – 200 ft)/ 34 ft = 41 ft).

<sup>9</sup> 2,650 ft/100 ft = 27 ft)

permanent structures up to approximately 72<sup>10</sup> feet would not impact airport safety at a distance of 2,650 feet from the end of the runway. During construction, cranes to be used in the vicinity of the Chino Airport would likely be near or taller than 72 feet. Implementation of mitigation measures Haz1 and Haz2 would ensure less than significant impacts for this issue area.

### Mitigation

**MM Haz3:** Coordination with the FAA would be required during construction to ensure compliance with FAA obstruction standards (FAR 77.11 guidelines).

**MM Haz4:** FAA notification would be required for the LWS pole installation along the portion of the alignment of the subtransmission modifications within the airport's southwest- to northeast-oriented take-off zone, approximately 2,650 feet from the end of the runway to ensure compliance with FAA obstruction standards (FAR 77.11 guidelines).

**f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? NO IMPACT**

The proposed project is not located in the vicinity of a private airstrip. No impact has been identified for this issue area.

**g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? NO IMPACT**

### Substation

Construction of the proposed substation would occur on a vacant land, and access would be provided from a western driveway connected to Flight Street<sup>11</sup>. All equipment and/or materials used in the construction of the proposed substation would be stored at the Mira Loma Substation, located approximately four miles to the northeast, and brought to the site prior to each day of work. During construction, Flight Street and its right-of-way would not be obstructed or blocked by equipment traveling to or from the proposed substation site. As no other development would be adjacent to the proposed substation, construction activities would not impair or interfere with any adopted emergency response or evacuation plans. Operation and maintenance of the proposed substation would also have no impact on adopted emergency response or evacuation plans because the substation would be mostly unmanned except for regularly scheduled maintenance and the design/layout would provide designated access for maintenance and/or repair work.

### Subtransmission and Telecommunication Alignments

Construction activities associated with the subtransmission line modifications (e.g., LWS pole and conductor installation) would take place within existing SCE utility easements and/or public street rights-of-ways, and may, in certain instances, require temporary lane closures. All lane closures would be conducted in accordance with local ordinances. As with the construction of the proposed substation, all

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<sup>10</sup>  $((2,650 \text{ ft} - 200 \text{ ft}) / 34 \text{ ft} = 72 \text{ ft})$

<sup>11</sup> In the event that improvements to Flight Street have not been made prior to construction of the substation, a temporary access road would be graded and installed. The temporary access road would be built based on the site's topography so that it would be accessible to all construction vehicles and equipment. This temporary access road would be built with gradients and curvatures that would permit heavy equipment usage and maneuvering.

equipment and/or materials would be stored at the Mira Loma Substation and brought to the site prior to each day of work. No lay down areas would be required. Access to the fire station located at 7550 Kimball Avenue would not be impaired during construction as it is not located on the alignment and all lane closures along Kimball Avenue would be temporary and limited to one lane.

Similarly, construction activities associated with the telecommunication improvements would take place within existing SCE utility easements and/or public street rights-of-ways, and may require temporary lane closures. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impact has been identified for this issue area.

**h. Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? LESS THAN SIGNIFICANT IMPACT**

As outlined above, the project site is not located in a designated wildland fire hazard zone. Although local area roadways would be used as staging areas for construction activities along portions of the subtransmission line, vehicles and equipment may be staged within the hard shoulders or rights-of-way of roadways to help minimize traffic impacts where flammable vegetation could be present. To prevent heat or sparks from vehicles or construction equipment from igniting such vegetation and causing a fire, SCE would be responsible for clearing work areas of brush and flammable vegetation to reduce the potential for fires and to direct workers to park vehicles away from dry vegetation. During operation, the project subtransmission lines may pose a fire hazard if vegetation or other obstructions come in contact with energized conductor. The proposed project would be constructed and maintained in a manner consistent with CPUC G.O. 95 and CPUC G.O. 165. Consistent with these and other applicable State and federal laws, SCE would maintain an area of cleared brush and flammable vegetation around the conductor, minimizing the potential for fire. Further, the applicant would work with developers along this route to insure that trees in proximity to the proposed line will not exceed 15 feet in height. Incorporation of these construction and operation BMPs would prevent the proposed project from exposing people or structures to a significant risk of fire. The impact of wildland fires would be less than significant.

**2.8 HYDROLOGY AND WATER QUALITY**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>VIII. HYDROLOGY AND WATER QUALITY:</b>				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 2.8.1 Setting

The proposed project is located within the Chino Basin Watershed Management Area (CBWMA) and is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB). Surface waters within the project site consist of two flood control channels: Cypress Channel and Cucamonga Creek. The Cypress channel crosses the subtransmission line at Kimball Road, west of Chino Airport. The Cucamonga Creek channel crosses the telecommunication alignment at Schleisman Road, east of the proposed substation site. All surface water runoff in the project area ultimately flows into the Santa Ana River, which is listed as an impaired water body for pathogens under Section 303(d) of the Clean Water Act (CWA) (2002).

The Federal Emergency Management Agency (FEMA) has determined floodplain boundaries for portions of San Bernardino and Riverside Counties. Floodplain boundaries in the project area are shown in Figure 2.8-1, Hydrological Features. The project area is approximately 30 miles east of the Pacific Ocean and approximately 10 miles down gradient of the San Gabriel Mountains.

Groundwater in the project area forms part of the Chino Groundwater Basin (Basin), an aquifer system that extends from the San Gabriel Mountains south to the Santa Ana River. Groundwater in the Basin is used as a source for drinking water. Since 1983, however, several operators of public water systems using Basin groundwater have had to modify their management efforts to account for high concentrations of total dissolved solids (salts), nitrate, and/or solvents (SRWQCB 2004).

The project area is located within a portion of the Chino Valley, which drains into the Prado Dam, a flood control structure located approximately 1.35 miles south of the nearest portion of the project site. The dam currently discharges flows at rates up to 9,000 cubic feet per second (cu ft/sec). There are plans to raise the height of the dam approximately 30 feet, which would in turn increase the discharge rate to 30,000 cu ft/sec (USACE 2006). The proposed project is above the Prado Dam inundation level at 566 feet above sea level (the “Prado Dam Flood Elevation 566 Take Line”) Therefore, the project site is not subject to flooding when Prado Dam is full.

## 2.8.2 Environmental Impacts and Mitigation Measures

**a. Would the project violate any water quality standards or waste discharge requirements? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Construction activities associated with the proposed substation, subtransmission line modifications and telecommunication improvements can introduce hydrocarbons, fluids, lubricants, and other toxic substances from construction equipment into the surrounding environment. Impacts to water quality would be significant. Implementation of mitigation measure Geo1 would ensure that water quality standards and discharge requirements would not be violated. A Notice of Intent (NOI) from the SARWQCB would be required for the proposed project, in accordance with the NPDES permit program. NPDES compliance requires the implementation of BMPs to reduce or eliminate stormwater pollution. Since construction of the proposed substation would impact more than one acre, a SWPPP would be required during construction to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the Clean Water Act (CWA). Implementation of a SWPPP would satisfy NPDES requirements, which in turn would ensure that significant water quality impacts would not result from construction activities associated with the proposed project. Therefore, a less than significant impact with mitigation incorporated has been identified for this issue area.

**b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? LESS THAN SIGNIFICANT IMPACT**

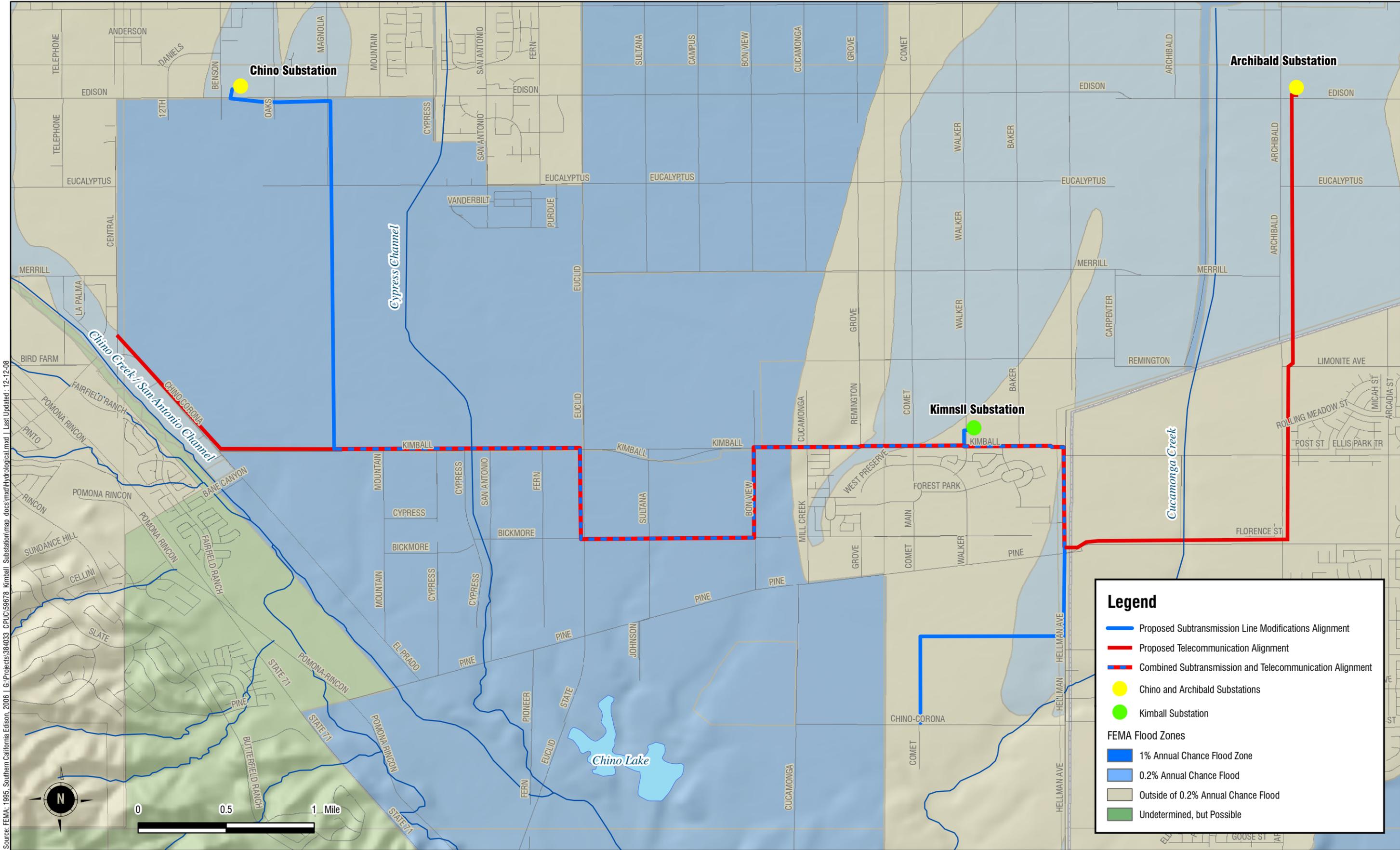
No water use is associated with the operation of the proposed project. However, increasing impervious surfaces in an area can result in a decrease in absorption rates, which can negatively impact groundwater supplies and recharge. The increase in impervious surfaces associated with the development of the substation would be minimal, and would not affect regional absorption and infiltration rates to a substantial degree. Drought-resistant vegetation would be used to landscape the perimeter of the proposed substation, and would use water from municipal water mains for irrigation. The subtransmission line modifications and telecommunication improvements do not require any water during operation and would not impact groundwater supplies or recharge.

The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. A less than significant impact has been identified for this issue area.

**c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on or off site? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

The existing topography of the proposed substation site would be altered to some extent during grading activities. As designed, the site would be graded at a one percent slope utilizing approximately 6,000 cubic yards of fill. Storm water runoff would flow through the site from north to south, and would



**Legend**

- Proposed Subtransmission Line Modifications Alignment
- Proposed Telecommunication Alignment
- Combined Subtransmission and Telecommunication Alignment
- Chino and Archibald Substations
- Kimball Substation

**FEMA Flood Zones**

- 1% Annual Chance Flood Zone
- 0.2% Annual Chance Flood
- Outside of 0.2% Annual Chance Flood
- Undetermined, but Possible

Source: FEMA, 1995. Southern California Edison, 2006 | G:\Projects\38-4033 CPUC\59678 Kimball Substation\map\_docs\mx\Hydrological.mxd | Last Updated: 12-12-08



be directed towards a 3-foot wide concrete swale located along the southern perimeter wall. Inside the perimeter wall, the substation would be covered with a 4-inch thick, pervious, crushed rock surface layer that would provide filtration for storm water runoff prior to it reaching the concrete swale. The swale would direct runoff into a municipal storm drain that will be installed along Flight Street when the road is improved.

Construction of the proposed substation would not alter the course of a stream or river. Although the drainage pattern of the site would be altered as a result of project construction, the implementation of the above-mentioned design features would minimize the potential for erosion or siltation.

### **Subtransmission and Telecommunication Alignments**

The proposed subtransmission line modifications and telecommunication improvements include the replacement of existing wood poles with new LWS poles. Since a minimal amount of area would be disturbed, construction activities associated with the pole replacements would not substantially alter any existing drainage patterns within the project area. As shown in Figure 2.8-1, above, portions of the subtransmission and telecommunication alignments traverse the Cypress and Cucamonga Creek flood control channels. However, in both cases, the conductor or fiber-optics cable would be strung over the channel and would not impact the drainage pattern of the area to any degree. No streams or rivers traverse the subtransmission and telecommunication alignments.

The proposed project would also require a SWPPP, with specific requirements for construction and post-construction BMPs. As previously discussed, implementation of the SWPPP that complies with the requirements of the SARWQCB would ensure that development of the proposed project would not result in substantial erosion or siltation on- or off-site. A less than significant impact has been identified for this issue area.

- d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

As previously stated, the drainage pattern of the proposed substation site would be altered during construction. However, the implementation of project design features such as the installation of a concrete swale and the use of a crushed rock surface layer inside the substation would minimize the potential for flooding of the site. Further, the proposed substation's drainage features would be connected to drainage facilities along Flight Street. Flight Street and its associated infrastructure is currently being planned and designed. Drainage facilities associated with the improvements to Flight Street would connect to existing drainage facilities along Kimball Avenue. As such, the drainage needs of the proposed substation site and the proposed industrial land uses surrounding the site would be incorporated into the design. Therefore, construction of the substation would not alter the course of a stream or river, and flooding on- or off-site as a result of construction or operation of the proposed substation would not be anticipated.

### **Subtransmission and Telecommunication Alignments**

As outlined in the previous response, construction associated with the proposed subtransmission line modifications and telecommunication improvements would not alter any existing drainage patterns within the project area. As outlined above, the subtransmission and telecommunication alignments traverse two

drainage features: Cypress Channel and Cucamonga Creek. Construction activities at the Cypress Channel crossing include pole and conductor replacement and the installation of fiber-optic cable, which would not impact the drainage feature. Fiber-optic cable would be installed along existing wood poles where the telecommunication alignment crosses Cucamonga Creek. No impacts are identified at this crossing. A less than significant impact has been identified for this issue area.

- e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems to provide substantial additional sources of polluted runoff? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

The proposed project would increase surface runoff due to the subsequent increase in impervious surfaces associated with the development of the substation. However, the proposed project would incorporate measures to divert the additional runoff, including the installation of a concrete swale to convey surface flows and the use of a crushed rock surface layer inside the substation to facilitate infiltration, so that no adverse impacts would occur. As outlined above, the proposed substation's drainage features would be connected to drainage facilities along Flight Street. Although Flight Street is currently being planned and designed, the drainage needs of the proposed substation site and the proposed industrial land uses surrounding the site would be incorporated into the design. It is also assumed that drainage features associated with the proposed substation would be properly sized so that the capacity of the existing drainage system would not be exceeded. The implementation of a SWPPP, which includes appropriate BMPs to prevent stormwater contamination, control sedimentation and erosion, and comply with the requirements of the CWA, would further reduce the potential for the proposed project to provide substantial additional sources of polluted runoff. A less than significant impact has been identified for this issue area.

### **Subtransmission and Telecommunication Alignments**

As previously stated, the proposed subtransmission line modifications and telecommunication improvements include the replacement of existing wood poles with new LWS poles. As a result, a limited amount of new impervious surfaces would be created during the construction of these project components, which in turn would result in a minimal amount of additional runoff. Given that the area's municipal stormwater conveyance system has been recently extended to serve the adjacent residential community of The Preserve in addition to future growth in the area, the proposed project's minimal stormwater runoff contributions would not exceed the capacity of this system. A less than significant impact has been identified for this issue area.

- f. Would the project otherwise substantially degrade water quality? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Water quality impacts could result from accidental spills of hydrocarbons, fluids, lubricants, and other toxic substances from equipment associated with the construction of the proposed substation, subtransmission line modifications and telecommunication improvements. Impacts to water quality would be significant. With the implementation of Mitigation Measure Geo1, the proposed project would comply with the provisions outlined in the NPDES permit program. Additionally, a SWPPP, pursuant to the CWA, would also be prepared for the proposed project. Adherence to the requirements included in the NPDES permit program, and approval of a SWPPP as part of Mitigation Measure Geo1 would ensure that potential impacts to water quality would be reduced to a less than significant level.

**g. Would the project place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? LESS THAN SIGNIFICANT IMPACT**

While the proposed substation would not be located within a 100-year floodplain, a large portion of the alignment of the subtransmission line modifications is located within a 100-year floodplain (Figure 2.8-1). Although new LWS would be placed within the floodplain, those poles would replace existing wood poles. As such, the subtransmission line modifications would not change the course of the floodplain in a manner that could impact housing in the project area by redirecting flood flows. A less than significant impact has been identified for this issue area.

**h. Would the project place within a 100-year floodplain structures that would impede or redirect flood flows? NO IMPACT**

A large portion of the alignment of the subtransmission line modifications is located within a 100-year floodplain. Since new LWS poles would replace existing wood poles, no new structures would be placed within the 100-year floodplain that would impede or redirect flood flows. No impact has been identified for this issue area.

**i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? NO IMPACT**

As described above, the proposed project would not directly or indirectly expose people or structures to a significant risk of flooding. In addition, the proposed project is not located within the Prado Dam's inundation hazard zone. As such, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam. No impact has been identified for this issue area.

**j. Would the project cause inundation by seiche, tsunami, or mudflow? NO IMPACT**

As outlined above, the nearest portion of the project site is located approximately one mile upstream of Prado Dam and 30 miles inland of the Pacific Ocean. The likelihood that the proposed project would be subject to inundation from seiche or tsunami events is considered minimal. Due to the flat topography of the project area, mudflows are not anticipated. No impact has been identified for this issue area.

**2.9 LAND USE AND PLANNING**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>IX. LAND USE AND PLANNING:</b> Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2.9.1 Setting

The proposed project is located within the cities of Chino and Ontario, and unincorporated areas of western Riverside County and southwestern San Bernardino County. Specifically, the proposed substation site is located in the City of Chino, east of Flight Street<sup>12</sup> and approximately 340 feet north of Kimball Avenue. The subtransmission line modifications would take place entirely within the boundaries of the City of Chino, while the installation of telecommunication infrastructure would extend from the City of Chino to the east into unincorporated Riverside County the City of Ontario to the west and north, respectively (Figure 2.9-1, Land Jurisdictions).

Historically a center for dairy farming, the City of Chino developed into a small suburban city in the 1970s. As well as expanding industrial and commercial areas within its boundaries, substantial recent residential development has occurred within southern and eastern portions of Chino. While the agricultural character of the area remains evident, primarily in southern portions of the City, the transition from primarily agricultural to residential and industrial uses is visibly underway within the project area. Land uses within the project area are varied, ranging from industrial and agricultural (crops and dairy), to residential and recreational. The proposed project is also adjacent to Chino Airport and passes through the boundaries of Chino State Prison, two of the largest individual land uses within the City of Chino.

Industrial and commercial areas surround Chino Substation to the north, east and west. Ayala Park is located to the south of Edison Avenue. The proposed subtransmission line route passes through agricultural lands within the western boundaries of Chino State Prison and adjacent to recently constructed industrial and commercial developments west of Euclid Avenue. To the east of Euclid Avenue, the route is adjacent to agricultural lands, primarily older, smaller dairy farms before passing through the newer residential areas of The Preserve. Chino Airport, with a variety of associated industrial areas, is located to the north.

Land uses surrounding the proposed substation site include agricultural (primarily dairy) and residential uses (Figure 2.9-2, Existing Land Use). As outlined above, the project area is transitioning from primarily agricultural to residential and commercial uses (Figure 2.9-3, Proposed Land Use).

Projects that maintain electrical facilities are generally exempt from local land use and zoning regulations. However, CPUC General Order No. 131-D, Section III C requires “the utility to communicate with, and obtain the input of, local authorities regarding land use matters and obtain any non-discretionary local permits.” Although the proposed project is exempt from local land use requirements, this IS/MND will consider local and State land use plans as part of the current environmental review and project design process.

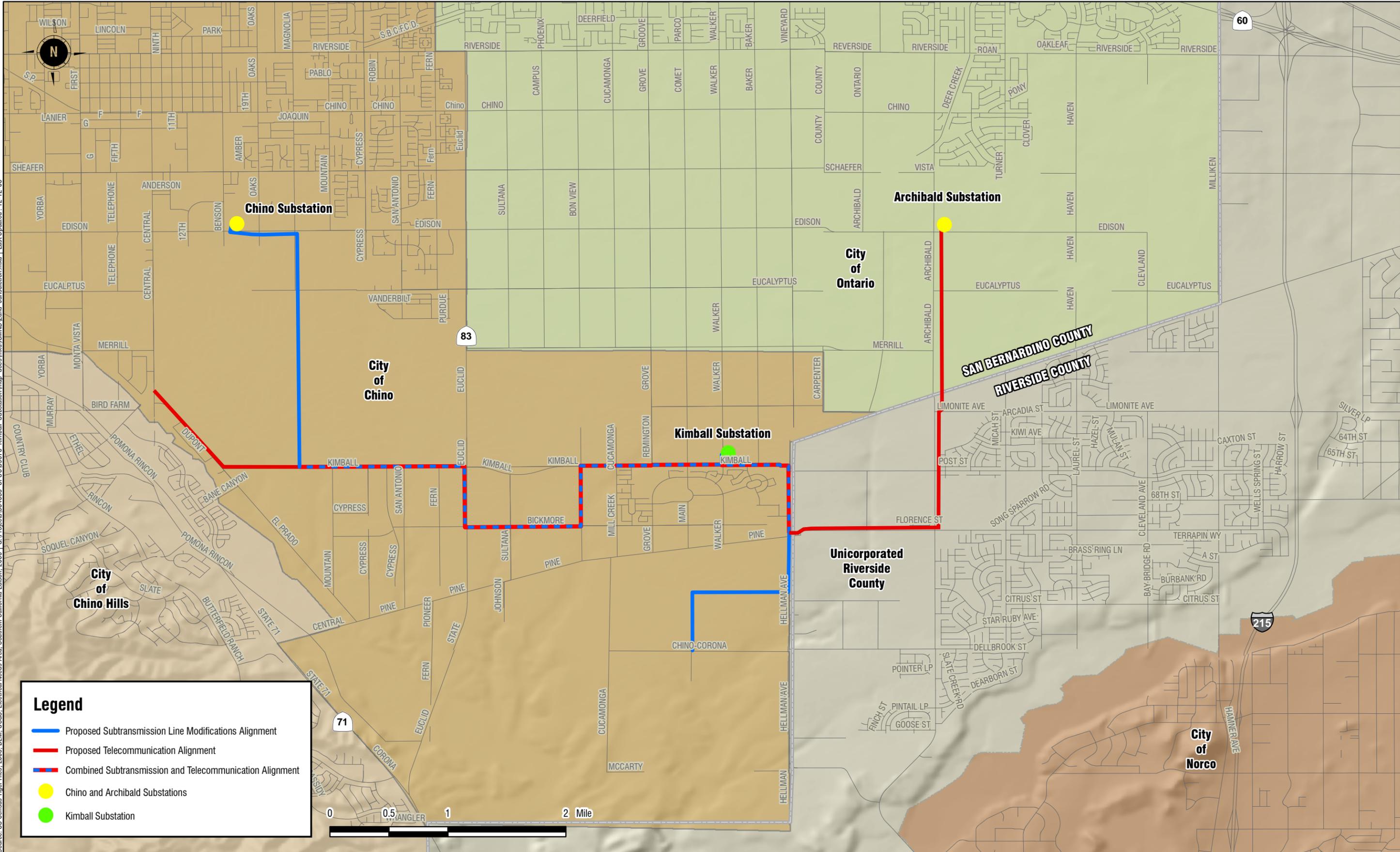
### **Applicable Plans**

City and county governments outline their long-term development strategies through the use of General and Specific Plans. General Plans provide broad policies and objectives to guide development, while Specific Plans provide detailed policies and site development standards for planning areas.

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<sup>12</sup> Formally known as Walker Avenue

Source: US Census Tiger Files, 2005; DEM; USGS, Electrical Needs Area; Southern California Edison, 2006 | G:\Projects\384-033 CPUC\59678 Kimball Substation\map\_docs\mxd\SMND\_Land\_Jurisdiction.mxd | Last Updated: 12-12-08

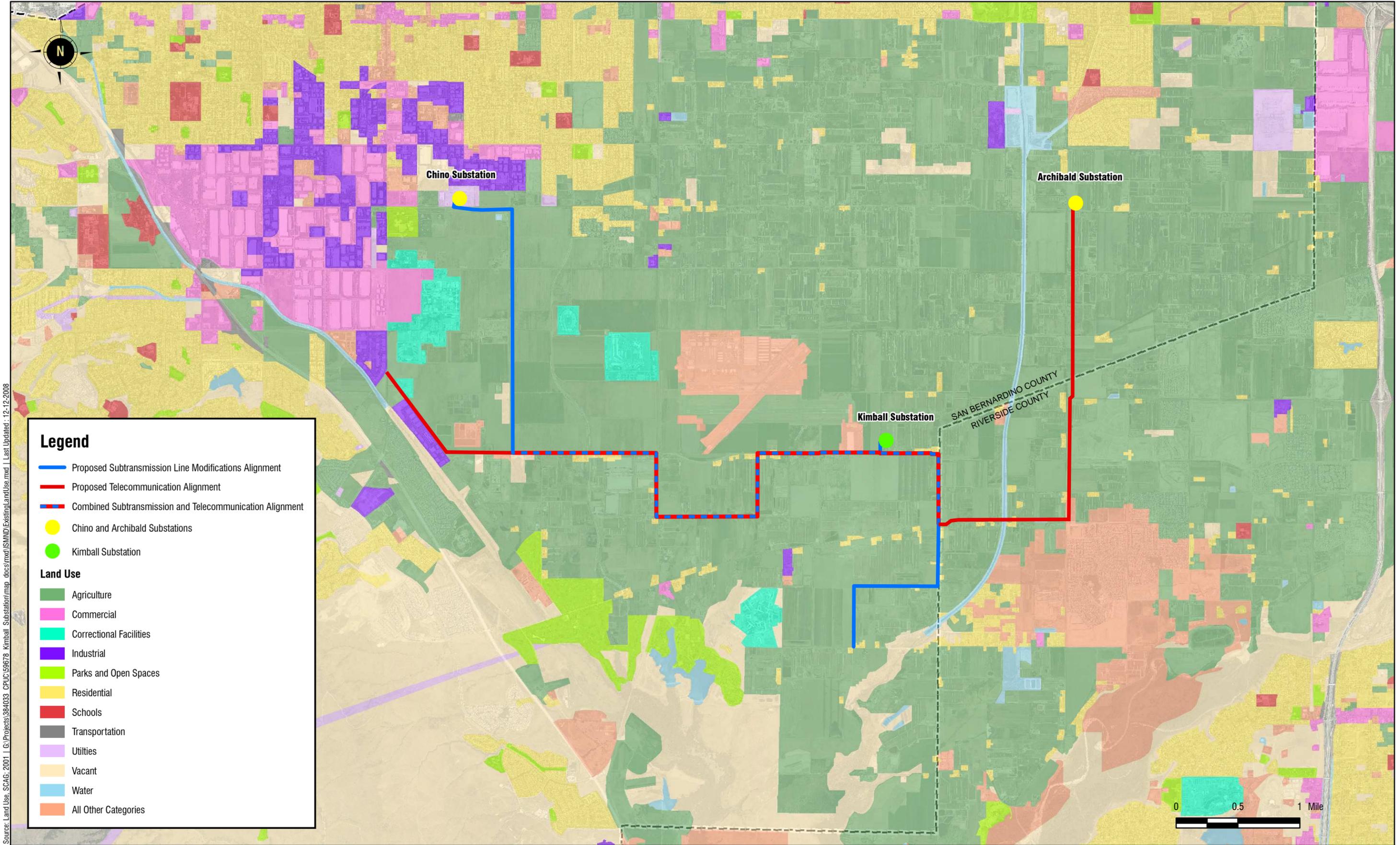


**Legend**

- Proposed Subtransmission Line Modifications Alignment
- Proposed Telecommunication Alignment
- Combined Subtransmission and Telecommunication Alignment
- Chino and Archibald Substations
- Kimball Substation





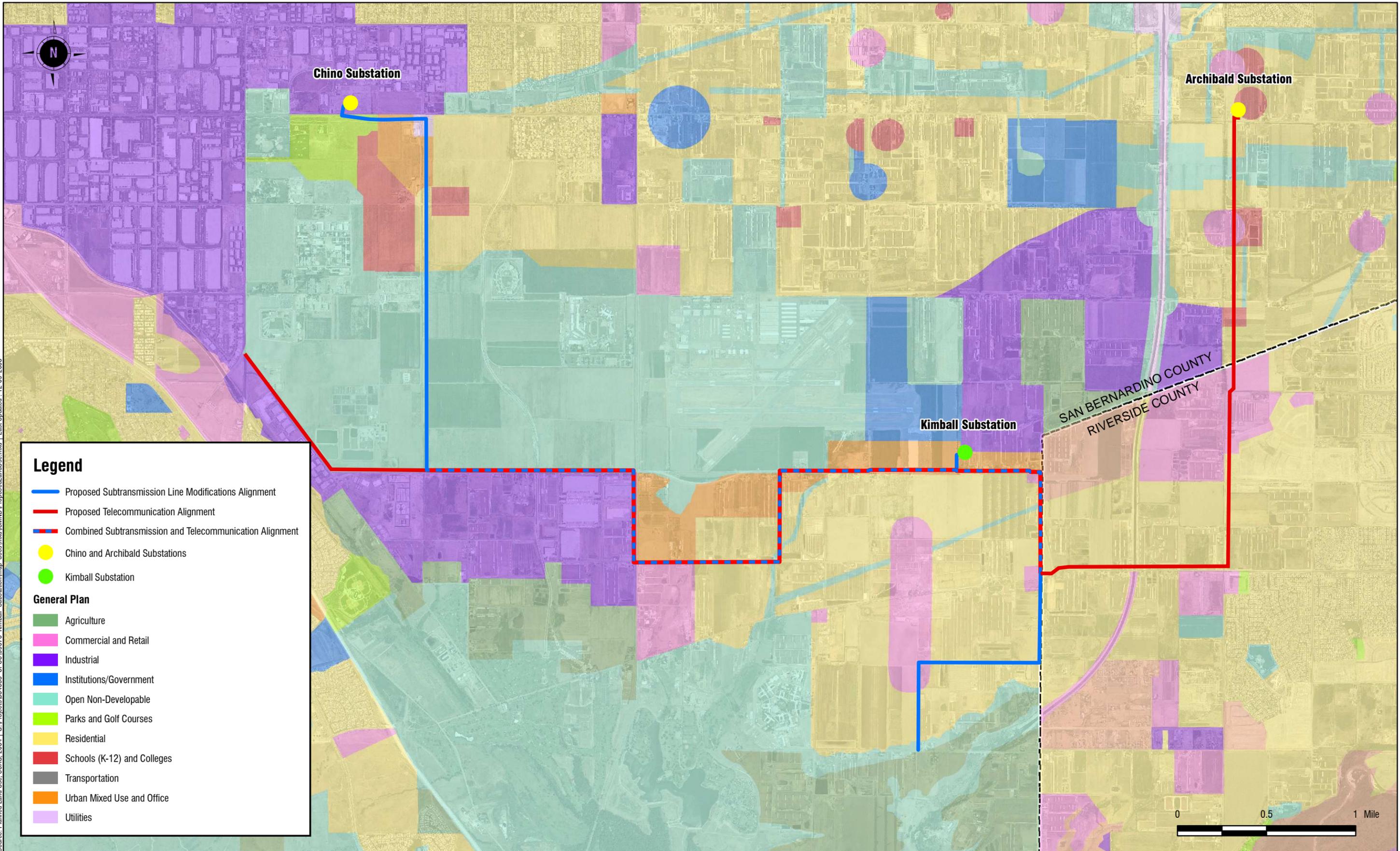


**Existing Land Uses**

FIGURE 2.9-2



Source: Planned Land Use, SCAG, 2004 | G:\Projects\384033\_CPUC\56678\_Kimball\_Substation\map\_docs\mxd\ISMND\Proposed\_Land\_Use.mxd | Last Updated: 12-06-2008



### Legend

- Proposed Subtransmission Line Modifications Alignment
- Proposed Telecommunication Alignment
- Combined Subtransmission and Telecommunication Alignment
- Chino and Archibald Substations
- Kimball Substation

### General Plan

- Agriculture
- Commercial and Retail
- Industrial
- Institutions/Government
- Open Non-Developable
- Parks and Golf Courses
- Residential
- Schools (K-12) and Colleges
- Transportation
- Urban Mixed Use and Office
- Utilities

Proposed Land Uses

FIGURE 2.9-3



## **City of Chino General Plan – 1981**

The majority of the proposed project is within the sphere of influence of the 1981 City of Chino General Plan, which was last amended in 1992. The 1992 update incorporated several elements of San Bernardino County's General Plan, as well as an existing Seismic & Public Safety Element adopted in 1974. The General Plan is an officially adopted statement of local policy concerning the City's long-term development. The General Plan contains goals, objectives, and policies which guide development within the City. The City is currently updating their General Plan. In preparation for the General Plan Update 2025, the City prepared an Existing Conditions Report in November 2006. The purpose of this report was to provide City decision-makers with an accurate account of the City's existing resources and to guide the City through its General Plan Update.

## **The Preserve Specific Plan – 2003**

The Preserve Specific Plan includes the area south of the proposed substation site, along the existing Chino-Corona-Pedley 66 kV subtransmission line. Specifically, The Preserve encompasses approximately 5,435 acres south of Kimball Avenue, north of Chino-Corona Road, west of Hellman Avenue, and east of Euclid Avenue. The Preserve consists of former and existing agricultural and dairy uses; however, the partially-complete community is planned for residential, commercial, industrial, airport related development, and open space upon buildout. The plan is centered around a Community Core area that will function as a downtown for the plan area and includes a business district with regional-serving commercial uses along Euclid Avenue (DC&E 2006).

## **Eastvale Area Plan of the Riverside County General Plan – 2003**

The eastern portion of the project area, which includes the proposed telecommunication improvements, is within the Eastvale Area Plan of the County of Riverside General Plan. This area is planned for light industrial and medium density residential uses. Light industrial uses include activities such as warehousing and distributing, assembly and light manufacturing, repair facilities, and supporting retail services. A medium density residential designation allows two to five dwellings per acre, limited agriculture and animal keeping. This area is also subject to the Riverside County MSHCP.

## **Chino Airport Master Plan – 2003**

The Chino Airport Master Plan serves to guide the development and expansion of the airport in response to projected future needs. The plan calls for an extension of an existing east-west runway, expansion of taxiways, and upgrades to the Runway Safety Area (RSA) required for compliance with FAA regulations. It also indicates that the airport plans to acquire lands within its Runway Protection Zone (RPZ) as well as negotiate an aviation easement over state-owned lands within the zone (DC&E 2006).

## **San Bernardino County General Plan – 2007**

A portion of the telecommunication alignment is located within an unincorporated area of San Bernardino County and is therefore subject to the provisions outlined in the 2007 County of San Bernardino General Plan. Like all General Plans, the San Bernardino General Plan contains goals, objectives, and policies which guide development within its sphere of influence.

## 2.9.2 Environmental Impacts and Mitigation Measures

### a. **Would the project physically divide an established community? NO IMPACT**

#### **Substation**

The proposed project would construct the substation on an approximately two-acre, currently vacant site for the purpose of improving electric system reliability and to meet the projected electrical demand of the developing community. No existing housing would be displaced. The site is currently surrounded by agricultural fields, dairy operations and a single-family residence that will be removed for a future business/commercial park. The closest established community to the proposed substation site is The Preserve, which is located south of Kimball Avenue. Therefore, construction of the proposed substation, including the improvements to Flight Street, would not divide the surrounding community.

#### **Subtransmission and Telecommunication Alignments**

As previously stated, the purpose of the proposed project is to serve the electrical demand of the developing community. The proposed above-ground subtransmission line modifications (e.g., pole replacement, conductor installation, etc.) would take place along a subtransmission line within existing SCE easements that already contain wood power poles and conductor. Therefore, the project does not propose the acquisition of new easements that may conflict with an existing land use or that could physically divide an established community. The below ground subtransmission line modifications would require the acquisition of a new utility easement, along Flight Street between Kimball Avenue and the proposed substation. The acquired easement would be within the road or its right-of way and therefore would not physically divide the surrounding community. No impact has been identified for this issue area.

### b. **Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? LESS THAN SIGNIFICANT IMPACT**

#### **Substation**

According to the City of Chino General Plan, the proposed substation site is zoned for airport-related development, which allows office, manufacturing, business parks, and other airport-compatible uses. As outlined above, the proposed land uses surrounding the proposed substation site include residential and commercial uses. Since the proposed project would serve the electrical demand for these future uses, it would be considered compatible with an airport-related development land use designation.

#### **Subtransmission and Telecommunication Alignments**

The subtransmission line modifications and telecommunication improvements would take place along a subtransmission line within existing SCE easements that already contain wood power poles and conductor, within public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. Therefore, the construction and operation these project components would not conflict with any applicable land use plan, policy, or regulation since they would not require a change in an existing land use.

It is worth noting that the Hereford to Chino-Corona Road segment of the alignment of the proposed subtransmission line modifications crosses land designated as “Community Core” in The Preserve

Specific Plan. The existing LWS poles and conductor along this segment are not incompatible with the uses and street pattern set forth for the town center in The Preserve Specific Plan. As such, the addition of a second conductor as a component of the proposed subtransmission line modifications would not create a new or additional conflict with a land use designation that does not already exist.

As outlined in Section 3.7, Hazards and Hazardous Materials, the proposed project would require FAA approval because of its proximity to Chino Airport. As discussed in more detail in that section, the proposed project would be in compliance with FAA notification and obstruction regulations.

In conclusion, the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. A less than significant impact has been identified for this issue area.

**c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

As outlined in Section 3.4, Biological Resources, the proposed substation site and the subtransmission alignment would not be subject to any MSHCP requirements and therefore would not conflict with an applicable habitat conservation plan or natural community conservation plan. A portion of the alignment of the telecommunication improvements is however under the jurisdiction of the Eastvale Area Plan of the Western Riverside County MSHCP. According to the MSHCP, a focused burrowing owl survey would be required prior to the commencement of construction activities along this portion of the telecommunication alignment in order to maintain consistency with the MSHCP. Should nesting pairs be found, adequate buffers in compliance with MBTA guidelines would be required if construction were to take place during the breeding season. Upon completion of a burrowing owl survey as required in Mitigation Measure Bio3, construction along this portion of the alignment would not conflict with the provisions of the MSHCP and a less than significant impact is associated with this issue.

**2.10 MINERAL RESOURCES**

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>X. MINERAL RESOURCES:</b> Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**2.10.1 Setting**

The project area is located in the Peninsular Range geomorphic province, an area bounded by the San Gabriel Mountains to the north, Chino Hills to the south/southwest, and the San Jacinto Mountains to the east. Mining in the southeast region of San Bernardino County primarily consists of sand, gravel and stone extraction (CDC 2006). There are no mining operations on or adjacent to the project site. There are

three oil fields south/southwest of the project area (Chino Soquel, Mahala, and Prado Corona), located primarily in the City of Chino Hills and the Santa Ana Mountains (CDC 2006).

## 2.10.2 Environmental Impacts and Mitigation Measures

- a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

As proposed, the project would develop an approximately two-acre, currently vacant site for the substation. Although oil fields exist in San Bernardino County, there are no active/inactive wells or known oil/gas deposits on or adjacent to the project site. Regional data indicates that sand, gravel, and stone resources exist in the region; however, there are no mining operations on or adjacent to the proposed substation site. Furthermore, the City of Chino General Plan identifies a large portion of its sphere of influence, which includes the entire proposed substation site, as a Class-3a Mineral Resource Zone (MRZ) (1981). The MRZ-3a classification refers to areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined. Although mineral deposits may exist on the proposed substation site, development of the substation would not significantly impact the availability of a potentially unknown mineral resource of economic value at a regional level given the small size of the site compared to the overall size of the area designated as a MRZ-3a zone in the City's General Plan. Therefore, construction of the substation would not result in the substantial loss of availability of a known mineral resource of economic value to the region and the residents of the state.

### **Subtransmission and Telecommunication Alignments**

In addition to the findings above, the subtransmission line modifications and telecommunication improvements would take place along a subtransmission line within existing SCE easements that already contain wood power poles and conductor, within public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. As proposed, these project components would not involve the development of new land or require a change in land use within the City of Chino (e.g., open space to be developed) that could impact a potentially unknown mineral resource of economic value.

In addition, a segment of the telecommunication improvements would take place along an existing SCE subtransmission alignment within unincorporated Riverside County. According to the County's General Plan, the area is also classified as a MRZ-3 zone. As outlined above, development within a MRZ-3 zone would not significantly impact the availability of a potentially unknown mineral resource of economic value at a regional level.

Finally, telecommunication improvements would also take place at the Archibald Substation within the City of Ontario. No mineral resources of statewide significance exist within the City's sphere of influence (City of Ontario 1992).

In conclusion, these project components would not result in a significant loss of availability of a known mineral resource of economic value to the region and the residents of the State. A less than significant impact has been identified for this issue area.

**b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? LESS THAN SIGNIFICANT IMPACT**

The Cities of Chino and Ontario and the Counties of Riverside and San Bernardino do not identify mineral resource recovery sites within their General Plans. However, as outlined above, construction of the substation would not significantly impact the availability of a potentially unknown mineral resource of economic value at a regional level given the small size of the site. Construction of the subtransmission line modifications would not involve the development or acquisition of new land within the City of Chino that may contain locally important mineral resource recovery sites. As discussed above, the telecommunication improvements that would take place within unincorporated Riverside County and the City of Ontario would not significantly impact the availability of mineral resource. Therefore, development of the proposed project would not result in the loss of availability of a locally important mineral resource of economic value. A less than significant impact has been identified for this issue area.

**2.11 NOISE**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XI. NOISE:</b> Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.11.1 Setting**

**General Noise Concepts**

Noise is defined as “unwanted sound.” Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by

discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only frequencies audible to the human ear.

### **Range of Noise**

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at 3 feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA, which can cause serious discomfort.

### **Perceived Noise Levels**

Due to the logarithmic nature of the decibel scale, increasing a sound intensity by a factor of 10 raises its level by 10 dB; increasing it by a factor of 100 raises its level by 20 dB; by 1,000, 30 dB and so on. However, due to the internal mechanism of the human ear and how it receives and processes noise, when two sound sources of equal intensity or power are measured together, their combined effect (intensity level) is 3 dB higher than the level of either separately. Thus, two 72 dB cars together measure 75 dB. Typically, a sound that is 10 dBA higher than another is generally perceived to be judged twice as loud.

### **Noise Descriptors**

Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level ( $L_{eq}$ ) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The peak hour  $L_{eq}$  is the noise metric used to collect short-term noise level measurement samples and to calculate the Day-Night Level ( $L_{dn}$ ).  $L_{dn}$  is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to dBA  $L_{eq}$  sound levels at night between 10 pm and 7 am. These additions are made to account for the noise sensitive time periods during nighttime hours when sound appears louder, and thus, is weighted accordingly. For example, monitoring experience has shown that 24-hour weighted  $L_{dn}$  is typically 2-3 dB higher than the mid-afternoon  $L_{eq}$  sound levels.  $L_{dn}$  does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure.

### **Traffic Noise**

The level of traffic noise depends on three factors: (1) the volume of the traffic; (2) the speed of the traffic; and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks.

Due to the logarithmic nature of traffic noise levels, a doubling of the traffic (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria this change is considered “barely perceptible.”

### **Construction Noise**

Equipment operation is the primary source of noise associated with construction activities. Noise levels are dependent on several factors including the number of machines operating within an area at a given

time and the distance between the noise source and receptor. Noise generated from construction equipment and associated activities can range between approximately 70 and 100 dBA at a distance of 50 feet from the source, as shown in Tables 2.11-1 and 2.11-2. As sound travels away from a source its acoustical energy dissipates, which lessens its perceived intensity at a receptor. Acoustic barriers (e.g., walls, berms, vegetation, etc.) can further attenuate noise levels if they occur between the noise source and receptor.

**Table 2.11-1. Typical Noise Levels for Construction Equipment**

Construction Equipment	Typical Noise Levels (dBA @ 50 ft)
Front Loaders	85
Backhoes, excavators	80-85
Tractors, dozers	83-89
Graders, scrapers	85-89
Trucks	88
Concrete pumps, mixers	82-85
Cranes (movable)	83
Cranes (derrick)	88
Forklifts	76-82
Pumps	76
Generators	81
Compressors	85
Pneumatic tools	98
Jack hammers, rock drills	98
Pavers	89
Compactors	82
Drill rigs	70-85

Source: Adapted from USEPA 1974

**Table 2.11-2. Typical Noise Levels for Construction Activities**

Construction Phase	Average Noise Level @ 50 Feet	
	Minimum Required Off-road Equipment	All Pertinent Equipment Onsite
Clearing	84 dBA	84 dBA
Excavation	78 dBA	88 dBA
Paving	78 dBA	79 dBA

Source: Bolt, Beranek and Newman 1971.

## **Applicable Regulations**

### ***Noise Element – City of Chino General Plan (updated 1995)***

The stated goal of the City of Chino’s Noise Element, which was last updated in 1995, is to define the City’s role and responsibility in safeguarding against noise pollution. The specific objective of the Noise Element is to reduce the negative impacts of noise on future developments by identifying major noise sources and compatible land uses. In order to accomplish this, the Noise Element provides policies and actions that define and summarize the programs to be implemented by the City to achieve the desired goals (DC&E 2006). Additionally, the Noise Element outlines specific interior and exterior noise standards which establish acceptable noise levels for a variety of land uses and sensitive receptors. For example, a 65 dBA  $L_{dn}$  exterior level is considered to be the threshold when noise “begins to substantially interfere with the enjoyment of outdoor activities”. Therefore, a 65 dBA  $L_{dn}$  exterior noise level (45 dBA  $L_{dn}$  interior noise level) would be the maximum sound level that could be received by sensitive receptors (e.g., single-family residence) without violating the City’s Noise Element.

### ***City of Chino Noise Ordinance***

The City’s Noise Ordinance (95-10, Section 9.40.040) provides a basis for controlling excessive and “annoying” noise from stationary sources such as construction activity, industrial plants, pumps, compressors, refrigeration units, etc. The ordinance provides specific standards to be applied for various land uses for both daytime and nighttime hours, prohibits certain noise sources, and describes the manner in which the noise standards are to be enforced (DC&E 2006). For example, in order to protect sensitive receptors from excessive and/or dangerous noise levels, the City limits construction activities to daytime hours (7 am to 8 pm).

## **Existing Noise Environment**

According to the City’s 2006 Existing Conditions Report, arterial traffic, freeway traffic, the Chino and Ontario Airports, and commercial/industrial properties are the most significant sources of noise within the City’s sphere of influence, which encompasses a majority of the project area.

A daytime/nighttime preconstruction noise survey was conducted for the proposed substation site by Veneklasen Associates, Inc., on September 19 and 20, 2005 (Appendix E). At the time of the survey, noise measurements at the site indicated the major sources of noise influencing daytime ambient background noise levels were the aircraft operations at the adjacent Chino Airport and construction activities south of Kimball Avenue associated with The Preserve residential development<sup>13</sup>. The buildout pursuant to The Preserve Specific Plan is expected to be 20-30 years from 2003; therefore, the construction activities associated with The Preserve development would likely continue during the construction of the proposed project. The survey also found that nighttime and early morning ambient noise consisted of dairy activities, an HVAC system located adjacent to the proposed substation site, and insect noise. Along the subtransmission and telecommunication alignments, roadway traffic was found to be the major source of ambient noise.

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<sup>13</sup> Presently, a portion of The Preserve has been built and occupied. The resulting increase in population has undoubtedly increased the background ambient noise level of the area during both the daytime and nighttime hours due to higher traffic flow conditions.

**Sensitive Receptors**

Uses that are typically considered noise sensitive include residences, schools, hospitals, parks, and wildlife habitats. Open space is only considered noise sensitive if it is used for recreation. A single-family residence is located immediately south of the proposed substation site. The residence is currently unoccupied and the property has been sold for development of a light industrial/commercial business park. A larger residential development is located immediately south of Kimball Avenue. The nearest residence in this development to the proposed substation site is approximately 480 feet to the south. The adjacent agricultural fields and dairy operations surrounding the proposed substation site will also be incorporated into the business park, which has a planned construction schedule that coincides with the development of the proposed substation. Since the residence is currently unoccupied, it will not be considered a sensitive receptor in the following analysis.

Several segments of the alignment of the subtransmission line modifications have adjacent residences, mostly along Kimball and Bon View Avenues. Additionally, one segment of the subtransmission alignment comes within 0.25 miles of the northern boundary of a “Community Core” land use designation within The Preserve Specific Plan, while another segment crosses the same land use designation along Hereford Avenue to the south. The Community Core designation allows for school use.

**Existing Conditions at the Proposed Substation Site**

The September 2005 daytime noise survey consisted of a set of noise measurements at the property line of the proposed substation site. The nighttime survey consisted of repeating all of the daytime measurements at the same locations. Ambient noise levels are shown in Table 2.11-3.

**Table 2.11-3. Ambient Noise Levels at the Proposed Substation**

Measurement Location	Existing Condition Measured (dBA)	
	Day	Night
1. Southern boundary of proposed substation site	54.3	41.6
2. Eastern boundary of proposed substation site	48.4	41.6
3. Northern boundary of proposed substation site	48.4	41.6
4. Western boundary of proposed substation site	48.4	41.6
5. Adjacent dairy farm east of the proposed substation site	48.4	41.6
6. South of Kimball Avenue in residential development	48.4	41.6

Source: Veneklasen 2005

Note: All sound levels are referenced to the L<sub>50</sub> (median) statistical noise level.

According to Table 2.11.3, daytime ambient noise levels were found to be consistent on and adjacent to the proposed substation site with the exception of the southern boundary of the property. The higher ambient noise level recorded at this location was likely influenced by traffic noise from Kimball Avenue. Nighttime ambient noise levels were found to be consistent at all noise measurement locations surveyed.

2.11.2 Environmental Impacts and Mitigation Measures

**a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? LESS THAN SIGNIFICANT IMPACT**

Construction activities associated with the proposed project, which include the proposed substation, the subtransmission line modifications, and the telecommunication improvements, would generate both intermittent and continuous noise. Intermittent noise would result from periodic, short-term equipment operation (e.g., the use of a backhoe for trenching). Continuous noise would result from equipment operation over longer periods, such as the steady use of a generator.

As described above, the residence immediately adjacent to the proposed substation site is currently unoccupied and the property has been sold for development of a light industrial/commercial business park. Therefore, the nearest sensitive receptors are residences located within The Preserve, approximately 480 feet to the south across Kimball Avenue. In addition, several segments of the subtransmission alignment have adjacent residences, mostly along Kimball and Bon View Avenues. Therefore, construction activities associated with the proposed project could potentially result in a significant impact to these sensitive receptors. However, all construction activities are anticipated to occur during normal business hours and would be required to comply with the applicable noise ordinance depending on the location of the construction activity (i.e., City of Chino Noise Ordinance for work along the subtransmission line; San Bernardino County or City of Ontario Noise Ordinance for telecommunication work at the Archibald Substation within each jurisdiction, etc.). If construction must take place outside of normal business hours, SCE will have the opportunity to apply for a variance with the appropriate jurisdiction to allow construction noise levels to exceed their established thresholds. SCE would be required to comply with the terms of any variance that may be granted. The incorporation of these project design features would reduce this potential impact to below a level of significance.

The proposed substation would generate noise during operation as these types of facilities typically generate steady noise from the power conversion process and the operation of transformers and auxiliary equipment needed to cool the transformer. According to the noise study, noise levels from transformers operating at full load (representing a worst-case scenario) are predicted to be at least 10 dBA below existing ambient noise levels recorded at the noise measurement locations on and adjacent to the proposed substation site, will meet applicable City of Chino noise standards as shown in Table 2.11-4 (Veneklasen 2005). Therefore, operational noise impacts associated with the proposed substation would be less than significant.

**Table 2.11-4. Proposed Substation Operation Noise Evaluation**

Measurement Location	Existing Condition Measured (dBA)		Transformer Noise Level (dBA)	City of Chino Noise Ordinance Thresholds (dBA)	
	Day	Night	Fan On	Day	Night
1. Southern boundary of proposed substation site	54.3	41.6	33	N/A	N/A
2. Eastern boundary of proposed substation site	48.4	41.6	35	N/A	N/A
3. Northern boundary of proposed substation site	48.4	41.6	31	N/A	N/A
4. Western boundary of proposed substation site	48.4	41.6	31	N/A	N/A
5. Adjacent dairy farm east of the proposed substation site	48.4	41.6	27	55	50
6. South of Kimball Avenue in residential development	48.4	41.6	24	55	50

Source: Veneklasen 2005

Note: All sound levels are referenced to the L<sub>50</sub> statistical noise level.

The subtransmission line modifications and telecommunication improvements would not generate any operational noise. No impacts are anticipated.

**b. Would the project result in exposure of persons to or generation of excessive ground borne vibration or groundborne noise levels? NO IMPACT**

The level of groundborne vibration that could reach sensitive receptors depends on the distance to the receptor, the type of equipment creating vibration, and the soil conditions surrounding the construction site. Ground vibration from construction equipment could be perceptible to receptors in the immediate vicinity of the construction activity. For example, the tamping of ground surfaces, the passing of heavy trucks on uneven surfaces, and the excavation of vaults and/or trenches could each create perceptible vibration in the immediate vicinity of the activity. Any impacts from construction-related groundborne vibration would be short-term in nature and confined to the immediate area surrounding the activity (not likely to exceed approximately 25 feet)

**Substation**

The construction of the proposed substation may involve the use of equipment that could result in the generation of groundborne vibration or groundborne noise. However, there are no sensitive receptors within the immediate vicinity of the proposed substation site. No impacts are anticipated.

**Subtransmission and Telecommunication Alignments**

Construction activities associated with the pole replacements along the subtransmission and telecommunication alignments would be temporary and would only require minor ground disturbance (e.g., drilling of bore holes for LWS poles, trenching, etc.). As such, these activities are not anticipated to generate excessive groundborne noise or groundborne vibration. Those residences adjacent to the subtransmission and telecommunication alignments would not be impacted.

**c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? LESS THAN SIGNIFICANT IMPACT**

**Substation**

Transformer noise contains pure-tone or “hum” components. This tonal quality is typically the most offensive characteristic of transformer noise. Auxiliary equipment includes cooling fans and oil pumps that operate depending on the internal temperature of the transformer oil. As outlined above, noise levels from the transformers operating at full load (representing a worst-case scenario) are predicted to be at least 10 dBA below existing ambient noise levels recorded at the noise measurement locations on and adjacent to the proposed substation site (Table 2.11-4) (Veneklasen 2005). These estimates do not take into account the attenuating effects of the surrounding landscape and vegetation nor the proposed wall around the substation, which would further reduce perceptible noise associated with the operation of the proposed substation.

The proposed substation’s operational noise contributions would be below existing ambient noise conditions. Therefore, the operation of substation would not significantly impact noise levels at the sensitive receptors located within The Preserve, south of Kimball Avenue.

## **Subtransmission and Telecommunication Alignments**

As previously stated, the subtransmission line modifications and telecommunication improvements would not generate any operational noise. Routine inspection and maintenance of the proposed project would be accomplished through periodic visits to the substation and subtransmission line alignments. Visits to these facilities would typically not involve a large crew of maintenance staff. Noise produced during these activities would be infrequent, temporary and isolated. No substantial permanent noise increases would occur. A less than significant impact has been identified for this issue area.

- d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? LESS THAN SIGNIFICANT IMPACT**

## **Substation**

As outlined above, operation of the proposed substation would not result in a substantial permanent increase in ambient noise levels. Construction noise associated with the proposed substation would however represent a short-term impact to ambient noise levels. These impacts could potentially affect those residences of The Preserve adjacent to Kimball Avenue, south of the proposed substation. These sensitive receptors may experience a temporary increase in noise levels above ambient conditions during construction of the proposed substation. However, the increase is not anticipated to be substantial because construction of the substation would be temporary (lasting approximately six months), typical construction activities, and would adhere to the regulations of the City of Chino Noise Ordinance. Therefore, construction of the proposed substation would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. A less than significant impact has been identified for this issue area.

## **Subtransmission and Telecommunication Alignments**

The subtransmission line modifications and telecommunication improvements would not generate any operational noise. Construction noise associated with the replacement of poles would however represent a short-term impact to ambient noise levels. These impacts could potentially affect those residences immediately adjacent to the alignments. However, due to the linear nature of the subtransmission line modifications and telecommunication improvements, construction would take place on a segment by segment basis. Construction activities at any one point along the alignment would be temporary, lasting no more than several days. Furthermore, all construction activities would take place during normal business hours and would adhere to the provisions outlined in the applicable noise ordinance depending on the location of the construction activity. Therefore, the potential impacts to sensitive receptors resulting from temporary noise increases associated with the construction activities along the alignments would not be substantial. Construction of the line modifications and telecommunication improvements would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. A less than significant impact has been identified for this issue area.

- e. **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? LESS THAN SIGNIFICANT IMPACT**

**Substation**

The state-operated Chino Airport is located adjacent to other side of street approximately 0.3 miles west/northwest of the proposed substation site. The airport’s two approach and take-off zones are oriented west to east and southwest to northeast, which does not place flight paths directly over the site. Although excessive noise level from aircraft operations could exist at the proposed substation site during construction, the temporary nature of construction work would limit the amount of noise exposure workers would experience. In addition, it is assumed that workers would utilize the appropriate noise safety gear while at the site. Therefore, the construction and operation of the proposed substation would not expose workers to excessive noise levels from air traffic. A less than significant impact has been identified for this issue area.

**Subtransmission and Telecommunication Alignments**

A portion of the alignment of the subtransmission line modifications is within a flight path and therefore could potentially expose workers to excessive air traffic noise. However, the duration of construction along this segment of the alignment would be temporary, lasting no more than several days. Therefore, workers in this portion of the project site would not be exposed to excessive noise from air traffic. A less than significant impact has been identified for this issue area. See response above for a more detailed analysis.

- f. **For a project within the vicinity of a private air strip, would the project expose people residing or working in the project area to excessive noise levels? NO IMPACT**

The proposed project is not located in the vicinity of a private airstrip; therefore, the project would not expose people residing or working in the project area to excessive noise levels. No impact has been identified for this issue area.

**2.12 POPULATION AND HOUSING**

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XII. POPULATION AND HOUSING:</b> Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.12.1 Setting

The proposed project includes the construction of an electric substation, the modification of 66 kV subtransmission lines, and the installation of telecommunication infrastructure within the cities of Chino and Ontario, and unincorporated areas of western Riverside County and southwestern San Bernardino County. The project area and the surrounding cities of Chino and Ontario are currently in a state of transition, from primarily agricultural to residential and commercial uses. This development is a result of substantial population growth in the region. Table 2.12-1 shows the historic and future population growth data for the region. Between 1990 and 2000 the populations of the cities of Chino and Ontario increased by approximately 13 percent and 19 percent, respectively. In comparison, the population of Riverside County increase by approximately 32 percent over the same period of time. By 2025, the populations of Chino and Ontario are anticipated to increase by an additional 30 percent and 63 percent, respectively from 2005.

**Table 2.12-1. Regional Population Trends**

Year	City of Chino	City of Ontario	Riverside County	San Bernardino County
1980	40,165	89,110	663,172	895,016
1990	59,682	133,179	1,170,412	1,418,380
2000	67,299	158,331	1,545,387	1,709,434
2005	77,146	170,951	1,931,332	1,971,318
2010	81,998	187,060	2,242,745	2,182,049
2015	87,313	213,839	2,509,330	2,385,748
2020	93,823	246,304	2,809,003	2,582,765
2025	100,142	277,799	3,089,999	2,773,945

Source: Southern California Association of Governments 2008

2.12.2 Environmental Impacts and Mitigation Measures

- a. **Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? LESS THAN SIGNIFICANT IMPACT**

Construction activities associated with the proposed project would be considered short-term and temporary. Construction of the proposed substation would require approximately 15 construction workers for a period of approximately 6 months. All other construction work would be conducted by existing SCE staff. Moreover, the proposed substation would not require any additional employees for operation. Therefore, the construction of the proposed project would not induce substantial population growth to the project area.

As proposed, the project would enhance electrical capacity and delivery within the project area. The current demand for electricity is a result of, but not a precursor to, approved development within the region. Although the proposed project would increase the efficiency with which electricity is made available to the planned development, no homes or businesses are proposed. Therefore, the proposed project would increase the reliability of the existing electrical supply in order to accommodate existing and planned growth. The proposed project would not induce substantial population growth in the region. It is worth noting that development of the proposed project would remove a potential constraint to

development in the area, and would therefore “facilitate” new growth. However, the new development that the proposed project would serve is included in the general plans for the Cities of Chino and Ontario and the Counties of Riverside and San Bernardino. As such, the proposed project would not induce growth beyond the land uses already planned for by those jurisdictions. A less than significant impact has been identified for this issue area.

**b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? NO IMPACT**

As proposed, the project would develop an approximately two-acre, vacant site for the proposed substation. No existing housing would be displaced. The subtransmission line modifications and telecommunication improvements would take place entirely within existing and/or acquired SCE utility easements public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. The proposed project represents improvements to existing transmission and telecommunication lines and would increase the reliability of the existing electrical supply. No existing housing would be displaced at the proposed substation site or along the transmission alignment. Implementation of the proposed project would not result in the displacement of housing nor would it necessitate the construction of any replacement housing. No impact has been identified for this issue area.

**c. Would the project displace substantial numbers of people necessitating the construction of replacement housing elsewhere? NO IMPACT**

As previously stated, the proposed project would not result in the displacement of any housing or businesses. Implementation of the proposed project would not result in the displacement of people, nor would it necessitate the construction of replacement housing elsewhere. No impact has been identified for this issue area.

**2.13 PUBLIC SERVICES**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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**XIII. PUBLIC SERVICES**

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2.13.1 Setting

Public services in the project area are provided and maintained by a variety of local and/or regional entities and are shown in Figure 2.13-1, Community Services.

### **Schools**

The majority of the project areas is served by two school districts. The Chino Valley Unified School District (CVUSD) serves a large portion of the project area. The CVUSD's service area encompasses 88 square miles and includes the cities of Chino, Chino Hills, and a portion of the City of Ontario as well as unincorporated areas of San Bernardino County. The Chaffey Joint Union High School District serves Ontario, Montclair, Rancho Cucamonga, and portions of Fontana, Upland, Chino, and Mount Baldy, California. The Ontario-Montclair School District Ontario-Montclair School District is a K-8 school district that covers all of Montclair and a large portion of Ontario. The district feeds into Chaffey Joint Union High School District. The portion of unincorporated Riverside County within the project area is served by the Corona-Norco Unified School District. The nearest school to the project site is Chino Hills High, located approximately 0.7 miles southwest of the westernmost portion of the telecommunication alignment (Figure 2.13-1).

### **Libraries**

San Bernardino County, in conjunction with the City of Chino, operates a public library that serves a large portion of the project area. The library is located at 13180 Central Avenue, Chino (DC&E 2006). Additional public libraries within the cities of Chino and Ontario also serve the project area (Figure 2.13-1).

### **Police**

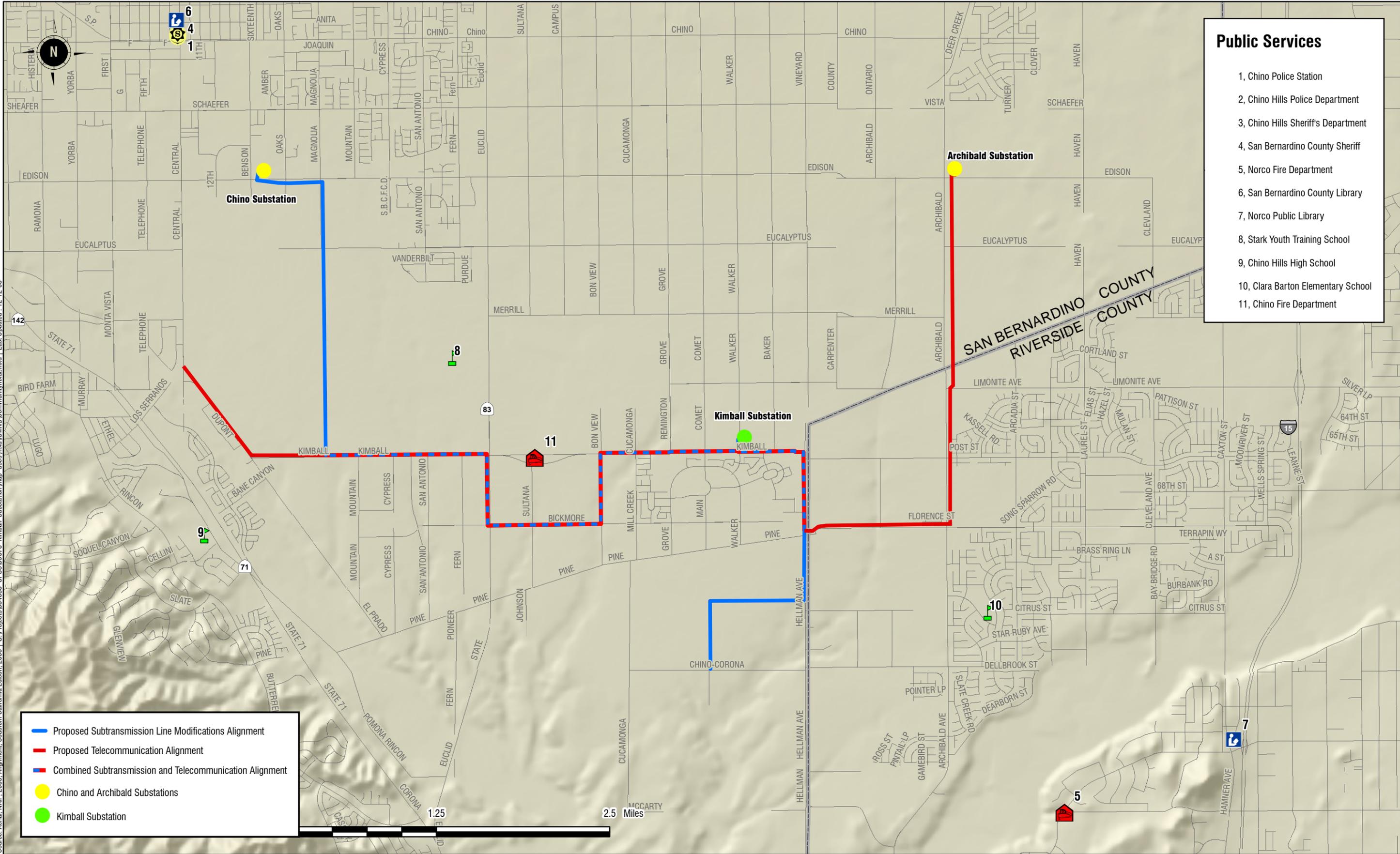
The Chino Police Department provides law enforcement services within the City of Chino, covering the majority of the project area. The Chino Police Departments main office is located at 13250 Central Avenue, Chino; The Ontario Police Department, which provides law enforcement services within the City of Ontario, has its headquarters at 2500 S. Archibald Avenue, Ontario, CA 91761. In Riverside County, law enforcement services are provided by the County Sheriff, with the nearest sheriff's station located approximately 15 miles east of the project site (DC&E 2006).

### **Fire**

The Chino Valley Independent Fire District (District) provides fire services to the City of Chino, the City of Chino Hills as well as portions of the surrounding unincorporated areas. The District has a staff of 110 full-time employees, five part-time employees, and 30 volunteers. The District operates six stations, three of which are located in Chino: Station #61 (13251 Central Avenue), Station #63 (7550 Kimball Avenue), and Station #65 (12220 Ramona Avenue). Station 63 was opened in 2006 and was relocated from the north side of Chino Airport. It is designed to serve the Preserve residential development as well as the airport.

San Bernardino County is responsible for aviation crash-fire-rescue services at the Chino Airport, but has no personnel on site. The District is responsible for structural fire protection and emergency medical services at the airport. In addition, it provides hazardous materials services and urban search and rescue.

Source: Aerial, NAD: 2005, Alignment, Southern California Edison, 2006 | G:\Projects\384033 CPUC\99678 Kimball Substation\map\_docs\mxd\SMND\Community\mxd.mxd | Last Updated: 12-12-08



- ### Public Services
- 1, Chino Police Station
  - 2, Chino Hills Police Department
  - 3, Chino Hills Sheriff's Department
  - 4, San Bernardino County Sheriff
  - 5, Norco Fire Department
  - 6, San Bernardino County Library
  - 7, Norco Public Library
  - 8, Stark Youth Training School
  - 9, Chino Hills High School
  - 10, Clara Barton Elementary School
  - 11, Chino Fire Department

- Proposed Subtransmission Line Modifications Alignment
- Proposed Telecommunication Alignment
- Combined Subtransmission and Telecommunication Alignment
- Chino and Archibald Substations
- Kimball Substation





The Ontario Fire Department currently has eight stations, and is in the process of developing 13 square miles in the New Model Colony where the Ontario Fire Department will soon begin construction of Fire Station Nine. Within the unincorporated portion of Riverside County within the project area, fire protection services are provided by the County.

### 2.13.2 Environmental Impacts and Mitigation Measures

- a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**

i) **Fire protection? LESS THAN SIGNIFICANT IMPACT**

The proposed project would involve the construction of an unmanned automated electrical facility and the improvement of existing transmission and telecommunication lines, and would not involve an increase in population within the surrounding area.

Construction of the proposed project is not anticipated to increase the demand for fire protection services in a manner that would result in the need for new or altered facilities. Operation of the proposed substation could possibly result in instances requiring fire protection services. Due to standard construction, operation and safety procedures such incidents are considered to be highly unlikely and therefore would not necessitate the need for new or physically altered facilities. Long-term operation of the proposed substation would not affect the ability of local or regional fire personnel to respond to fires, nor would it affect response times or other service measurements.

The proposed project would not result in a direct or indirect population increase. The proposed project is not anticipated to result in an increase in requests for fire protection services and would not represent an adverse affect on the District's ability to maintain its current level of service. A less than significant impact has been identified for this issue area.

ii) **Police protection? NO IMPACT**

Construction activities associated with the proposed project are not anticipated to increase the demand for police protection services in the project area. When operational, the proposed substation would include security features such as a perimeter wall, locking access gate, and nighttime lighting. These features would help reduce the demand for police protection. Therefore, the long-term operation of the proposed substation would not result in a need for additional police facilities nor would it affect police response times or other service measurements.

Implementation of the proposed project would not result in an increase in local residents within the project area, and would not result in an increase in requests for police protection services from the Cities of Chino and Ontario or Counties of San Bernardino and Riverside. No impact has been identified for this issue area.

iii) **Schools? NO IMPACT**

As outlined above, the proposed project would not generate an increase in local population. The proposed substation would be automated, requiring no additional employees for its operation. The

subtransmission line modifications and telecommunication improvements would not require additional employees for operation. Implementation of the proposed project would not result in an increase of local residents and/or school age children within the project area. Therefore, the proposed project would not result in an increase in demand for CVUSD school facilities. No impact has been identified for this issue area.

**iv) Parks? NO IMPACT**

Park facilities within the project area are detailed in Section 3.14, below. The proposed project is not anticipated to induce short-term or long-term population growth, either during project construction or operation (i.e., the proposed project would not result in an increase of local residents). Therefore, implementation of the proposed project would not increase demand on existing parks in the project area, and no new or expanded park facilities would be required. No impact has been identified for this issue area.

**v) Other public facilities? NO IMPACT**

Implementation of the proposed project would not result in an increase in population and would not affect other governmental services or public facilities. No impact has been identified for this issue area.

**2.14 RECREATION**

	<b>Potentially Significant Impact</b>	<b>Less Than Significant with Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>XIV. RECREATION:</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**2.14.1 Setting**

Parks and open space within and adjacent to the project area include several small neighborhood and community parks in the Cities of Chino and Ontario, as well as Prado Regional Park and Chino Hills State Park. The locations of these parks are shown in Figure 2.13-1, above. Riverside County, San Bernardino County, and the State of California also operate parks and maintain open space in the project area as shown in Figure 2.13-1, above. One city-owned park, Ayala Park, is located within 300 feet of the proposed subtransmission line, immediately south of the Chino Substation along Edison Avenue.

2.14.2 Environmental Impacts and Mitigation Measures

- a. **Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? NO IMPACT**

Population growth places a burden on existing recreational facilities, and the associated increase in demand can result in the physical deterioration of facilities. The proposed project is not anticipated to induce any population growth, either during project construction or operation. The proposed project would not lead to or accelerate the physical deterioration of any parks or recreational facilities. No impact has been identified for this issue area.

- b. **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? NO IMPACT**

The proposed project does not include recreational facilities nor does it require the construction of new facilities or the expansion of existing recreational facilities. No adverse physical effects on the environment would be generated by recreational facilities resulting from the development of the proposed project. No impact has been identified for this issue area.

2.15 TRANSPORTATION/TRAFFIC

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XV. TRANSPORTATION/TRAFFIC:</b> Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 2.15.1 Setting

Transportation planning and programming in the project area is the responsibility of a number of agencies including the Cities of Chino and Ontario, as well as the Counties of San Bernardino and Riverside within their respective jurisdictions. Regional transportation planning is also undertaken by the San Bernardino Association of Governments (SANBAG) and the Southern California Association of Governments (SCAG). At the State level, Caltrans is the agency responsible for funding and maintaining the State highway and interstate highway system (DC&E 2006).

Major east/west roads in the project area include Edison and Kimball Avenues. Major north/south roads in the project area include Central and Euclid Avenues. State Route (SR) 60 connects residents in the project area with other major Southern California communities. Regional north/south access is provided by SR 71, extending from Interstate 10 to SR 91 (DC&E 2006).

The primary mode of transportation in project area is vehicular travel. The project area's roadway system includes a range of facilities including regional freeways (SR71), expressways (SR 83 or Euclid Avenue), major arterials (Edison Avenue), primary arterials, secondary arterials (Kimball Avenue), and collectors (Brickmore Avenue) (DC&E 2006).

The cities of Chino and Ontario and Riverside County have each designated specific roadways to be used by trucks carrying oversized loads, either by size or weight. Designated truck routes are shown on Figure 2.15-1, Project Area Circulation. The purpose of designated truck routes is to identify the most appropriate routes for "through" trucks in the project area, such as avoiding residential districts and sensitive land uses such as schools, senior centers, hospitals and day care centers.

Project-area roadway efficiencies were evaluated in the City of Chino's 2006 *Existing Conditions Report*, prepared by Design, Community & Environment. The roadways were ranked according to guidelines established in a 1997 update to the Highway Capacity Manual that assigns a Level of Service (LOS<sup>14</sup>) rating based on factors such as speed, travel time, ability to maneuver, traffic interruptions, and safety. In conjunction with residential developments in the area, the City of Chino is planning to upgrade several underperforming roadways to operate at an improved LOS. However, there are no roadways currently operating at an unacceptable LOS (D or worse) in the project area (DC&E 2006).

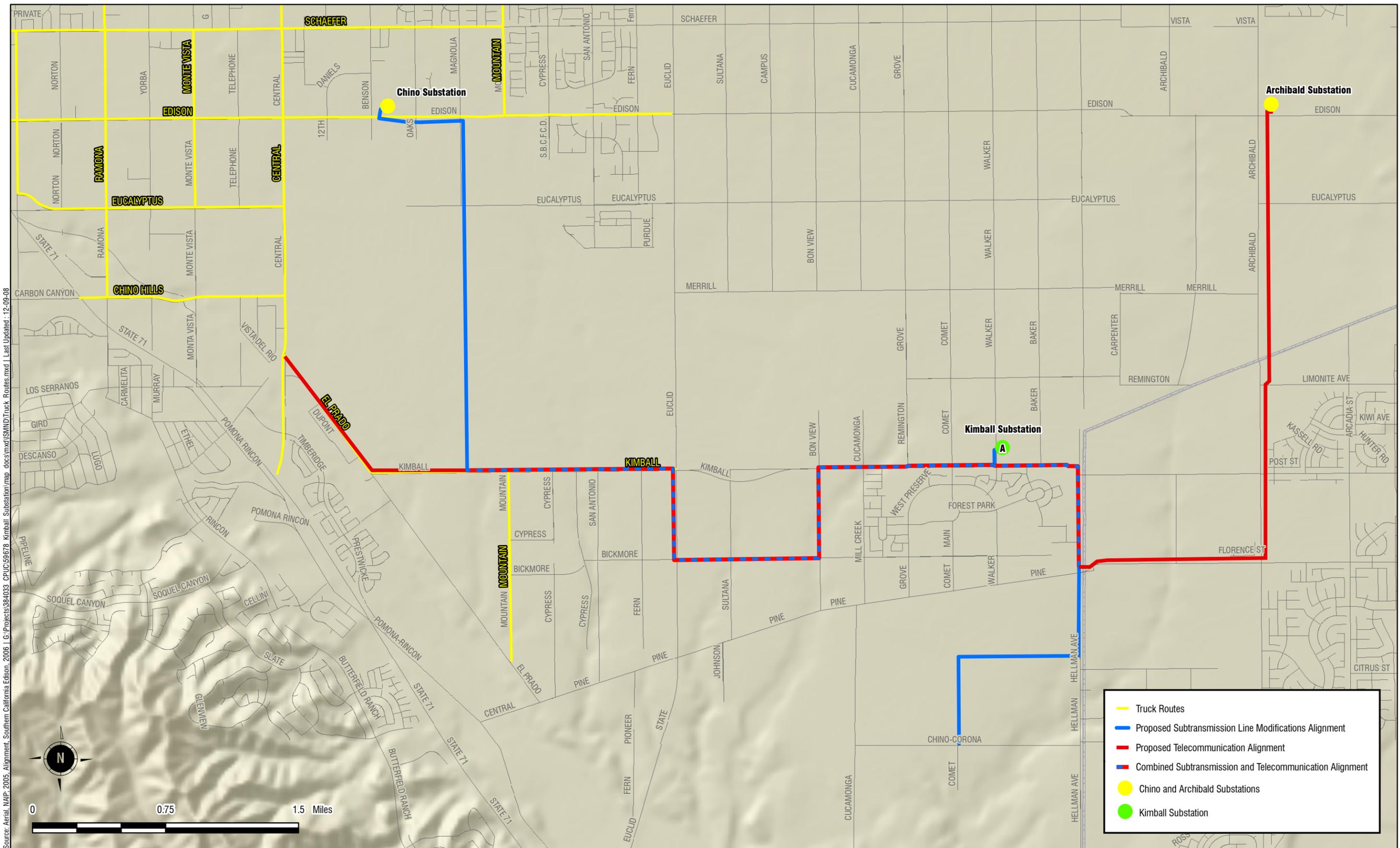
## 2.15.2 Environmental Impacts and Mitigation Measures

- a. Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Construction traffic associated with the development of the proposed project would include construction crews and equipment for the proposed substation, subtransmission line modifications, and telecommunication improvements. Along with equipment and materials deliveries, on a daily basis, approximately 15 construction workers would arrive and depart the substation site during any given phase of proposed project construction (SCE 2006). The resulting incremental increase in peak hour traffic

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<sup>14</sup> The most efficient roadways are designated LOS A, representing free-flow of traffic; while the least efficient roadways are designated LOS F, representing forced or broken-down flow. The City of Chino considers roadways operating at a LOS D or better to be generally acceptable (City of Chino General Plan 1981).



Source: Aerial, N.A.P., 2005, Alignment, Southern California Edison, 2006 | G:\Projects\384033 CPUC\59678 Kimball Substation\map\_docs\mxd\SMN\DT\Truck Routes.mxd | Last Updated: 12-09-08



volumes associated with these employees is below the threshold for requiring analysis in both San Bernardino and Riverside counties, and would not represent a significant impact on local area roadways. Additionally, all materials used in the construction of the proposed project would be delivered by truck. Trucks would utilize major streets and would be scheduled during off-peak traffic hours.

An estimated total of 300 truck trips over the course of construction would be necessary to import fill material during grading of the proposed substation site. Truck deliveries would be scheduled during off-peak hours and phased over a five-week grading period to alleviate traffic impacts to local area roadways (SCE 2006). Although trucks would be required to use designated truck routes when arriving to and from the project site, construction of the proposed substation would cause a temporary increase in traffic that is substantial in relation to the existing capacity of the local street system. However, incorporation of Mitigation Measures Traffic1 through Traffic4 associated with scheduling of construction deliveries would reduce this impact to below a level of significance.

During construction of the subtransmission line modifications and telecommunication improvements, periodic single-lane closures may be required, which could temporarily impact traffic conditions within the project area, resulting in a significant impact. However, Mitigation Measure Traffic1 would require Implementation of a Traffic Control Plan (TCP) to limit potential traffic impacts to the project area. Specifically, the measures outlined in the TCP will ensure an adequate flow of traffic in both directions by providing sufficient signage to alert drivers of construction zones, notifying emergency responders prior to construction, conducting community outreach, and controlling traffic around schools. With implementation of this mitigation, temporary impacts to the circulation network during construction would be reduced to below a level of significance.

The following addresses permanent transportation and traffic impacts associated with operation of the proposed project. As discussed in Section 3.12.2, the proposed project would not induce population growth in the region. Additionally, the proposed project does not include the development of new housing and/or commercial and industrial uses, which are uses typically associated with the generation of additional traffic. Limited SCE personnel would only visit the substation for electrical switching and routine maintenance two or three times per week, and as such would not impact traffic load and capacity of the street system within the project area. The proposed substation subtransmission, and telecommunications alignments, would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the local street system. A less than significant impact with mitigation incorporated has been identified for this issue area.

### **Mitigation**

**MM Traffic1** SCE shall implement a Traffic Control Plan (TCP) to limit potential traffic impacts to the project area. Specifically, the measures outlined in the TCP will ensure an adequate flow of traffic in both directions by providing sufficient signage to alert drivers of construction zones, notifying emergency responders prior to construction, conducting community outreach, and controlling traffic around schools. The measures shall include the following:

- To the extent feasible, truck traffic shall be scheduled for off-peak hours to reduce impacts during periods of peak traffic.
- Truck traffic shall be phased throughout the five-week grading period and site preparation construction phase.

- Truck traffic shall use designated truck routes when arriving to and from the proposed substation site.
- If lane closures are required, SCE shall comply with BMPs established by the Work Area Protection and Traffic Control Manual (California Joint Utility Traffic Control Committee 1996). All work within public roadway rights-of-way shall be subject to the conditions established by the appropriate jurisdiction in an encroachment permit to be secured prior to initiating work within the right-of-way.

**b. Would the project cause, either individually or cumulatively, a level-of-service standard established by the county congestion management agency for designated roads or highways to be exceeded? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

As outlined above, construction activities associated with the proposed project impact traffic conditions within the project area. However, incorporation of Mitigation Measure Traffic1 would reduce this potentially significant impact to below a level of significance. Additionally, all materials used in the construction of the proposed project would be delivered by truck. Trucks would utilize major streets and would be scheduled during off-peak traffic hours. Therefore, construction traffic associated with the proposed project would not degrade an existing LOS.

The proposed project does not include the development of new housing and/or commercial and industrial uses, which are uses typically associated with the generation of additional traffic. In addition, the proposed substation would be fully automated, with all electrical equipment remotely monitored and controlled by a power management system at Mira Loma Substation. SCE personnel would only visit the substation for electrical switching and routine maintenance, anticipated to occur two or three times per week. This limited level of project traffic would not impact an established LOS in the project area. Therefore, from an operational standpoint, the proposed substation would not cause a traffic scenario that exceeds an established LOS. A less than significant impact with mitigation incorporated has been identified for this issue area.

**c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

As previously stated, the County-operated Chino Airport is adjacent to the proposed substation site. The airport's two approach and take-off zones are oriented west to east and southwest to northeast, which places flight paths over a portion of the subtransmission and telecommunication alignments but not the proposed substation site.

A compatibility study prepared by Stoner Associates (2005) concluded that the airport would not affect the feasibility of establishing an electrical power distribution substation on the proposed site. However, any structure (temporary or permanent) exceeding 20 feet in height would require notification to the FAA due to the proximity of the proposed substation site to the airport. It is anticipated that during construction, equipment may exceed the 20-foot FAA threshold and therefore would require notification (Haz1). However, the low-profile design of the proposed substation would limit the height of permanent structures to less than 20 feet.

The height of existing LWS poles range from 50-55 feet above grade and the height of the proposed LWS would range from 60-65 feet. The LWS poles to be installed along the Chino-Corona-Pedley 66 kV subtransmission line would exceed 20 feet in height and therefore would also require notification (Haz2).

Construction and operation of the proposed project would not require the use of helicopters. Implementation of Mitigation Measures Haz3 and Haz4 would ensure the proposed project would not disrupt or affect air traffic patterns or result in a significant safety risk. A less than significant impact has been identified for this issue area.

**d. Would the project substantially increase hazards because of a design feature or incompatible uses? LESS THAN SIGNIFICANT**

The proposed project would be located either on undeveloped land or land within existing and/or newly acquired SCE utility easements, public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. The proposed project would therefore not impact any public roads or create incompatible uses. During construction, the proposed project would be required to implement a TCP to ensure adequate safety measures are in place to protect workers at the project site as well as motorists utilizing local area roadways. The proposed project would not substantially increase hazards due to a design feature or an incompatible use. A less than significant has been identified for this issue area.

**e. Would the project result in inadequate emergency access? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

The proposed project does not propose changes to the existing circulation system that could potentially affect emergency access for the fire or police departments. As outlined above, TCP would be required, which would include traffic control measures to limit potential impacts to emergency services and ensure safe ingress and egress for local users. Specifically, these measures would ensure an adequate flow of traffic in both directions by providing sufficient signage to alert drivers of construction zones, notifying emergency responders prior to construction, conducting community outreach, and controlling traffic around schools. The implementation of Mitigation Measure Traffic1, the TCP, would result in adequate emergency access during construction activities associated with the proposed project. A less than significant impact with mitigation incorporated has been identified for this issue area.

**f. Would the project result in inadequate parking capacity? NO IMPACT**

**Substation**

During construction of the substation, construction-related vehicles and equipment would be confined to existing SCE easements, the Flight Street right-of-way, or within the proposed substation site. Therefore, construction of the proposed substation would not impact parking capacity in the project area.

No existing parking capacity would be lost as a result of construction or operation of the proposed substation. As previously discussed, the proposed substation would be located on a two-acre, vacant lot. The substation would be fully automated; therefore, employees would only be present during routine maintenance and/or emergency work. During those site visits, employees' vehicles would be parked within the substation, not on public streets. Operation of the proposed substation would not impact parking capacity in the project area.

**Subtransmission and Telecommunication Alignments**

Construction of the subtransmission line modifications and telecommunication improvements would take place within existing and/or newly acquired SCE utility easements, public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations. No existing parking capacity would be lost as a result of construction or operation of the proposed subtransmission and telecommunication alignments. Construction activities would not impact parking capacity in the project area. No impact has been identified for this issue area.

**g. Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? NO IMPACT**

As previously discussed, the proposed project would enhance electrical capacity and delivery in the Cities of Chino and Ontario, as well as unincorporated portions of Riverside and San Bernardino Counties, through the construction of an electric substation, the modification of 66 kV subtransmission lines, and the installation of telecommunication infrastructure. Since the proposed project would be located either on undeveloped land or land within existing and/or newly acquired SCE utility easements, public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations it would not impact any adopted local policies or programs supporting alternative transportation. No impact has been identified for this issue area.

**2.16 UTILITIES AND SERVICE SYSTEMS**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVI. UTILITIES AND SERVICE SYSTEMS:</b>				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project=s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## 2.16.1 Setting

The proposed project is located within the cities of Chino and Ontario and unincorporated areas of western Riverside County and southwestern San Bernardino County. SCE provides electrical service within the project area. As outlined in Section 1.7, the proposed project would enhance SCE's electrical capacity and delivery within the project area. Within the majority of the project area, the City of Chino provides potable water, wastewater, solid waste, and recycling services.

### **Solid Waste Haulers**

Within the project area, solid waste disposal needs are provided by several entities. Waste Management, Inc. (WM), a private company, contracts with the City of Chino for solid waste collection, transfer, and disposal, as well as recycling services. The City does not have a Waste Delivery Agreement with the County of San Bernardino. Therefore, it cannot dispose of its waste within the county. Instead, Chino's solid waste is sent to the West Valley Material Recovery Facility and Transfer Station (West Valley MRF), located in Fontana. From there, the waste is transported to the El Sobrante Landfill, located in Riverside County. Burrtec Waste Industries (Burrtec) is responsible for solid waste collection, transfer, and disposal, as well as recycling services, within the unincorporated areas of Chino's sphere of influence. Similar to Waste Management, Burrtec diverts waste to the West Valley MRF, before making its way to the El Sobrante Landfill (DC&E 2006).

The City of Ontario's Utilities/ Solid Waste Department provides solid waste disposal within its jurisdiction. Additionally, the Riverside County Waste Management Department (RCWMD) contracts out solid waste services for the unincorporated areas within Riverside County.

### **Recycling and Disposal Facilities**

The West Valley MRF is located on a 28-acre site in the City of Fontana. It operates as a 50-50 joint venture between Kaiser and Burrtec. The facility has a permitted capacity of 7,500 tons per day, and a daily in-take capacity of 5,000 tons per day. Currently, though, it is processing around 4,000 tons of waste and recyclables per day, of which 300 tons are from Chino (DC&E 2006).

According to the RCWMD, the El Sobrante Landfill is the closest servicing landfill to the project site, located at 10910 Dawson Canyon Road in Corona. The landfill, located in the City of Corona, has been accepting solid waste from Chino since 1993 (DC&E 2006). The Class III (non-hazardous municipal solid waste), permitted landfill is currently active and accepts mixed municipal waste, construction/ demolition waste, and tires. It has a total acreage of 1,322 acres and disposal acreage of 645 acres. Permitted capacity of the landfill is approximately 109,000,000 tons. The remaining capacity (as of January 2007) is 37,000,000 tons. Total daily permitted capacity is 10,000 tons. The 2006 daily average volume disposed was 3,590 tons. The projected closure date of the facility is January 2031 (California Integrated Waste Management Board 2007).

### **Water Supply**

The water utilities of Chino and Ontario operate within the respective cities' Public Works Departments, and provide water through membership in several local and regional water providers. Both cities are contracting agencies of the Inland Empire Utilities Agency (IEUA), and members of the Chino Basin Desalter Authority (CDA).

The Chino Water Utility obtains water from several primary water sources, including imported water, delivered from outside the City of Chino; local water, from the local groundwater supply; recycled water, processed locally by the IEUA (DC&E 2006). Twenty-eight percent of Ontario's water is imported surface water supplied through the State Water Project through the Sacramento/San Joaquin Bay Delta in Northern California. The State Water Project is also used to recharge local aquifers. The majority of Ontario's drinking water comes from pumping local groundwater wells in the Chino Basin Aquifer (City of Ontario 2008)

The unincorporated portions of the project area are served the Monte Vista Water District (MVWD). The District provides retail and wholesale water supply services to a population of over 100,000 within a 30-square mile area, including portions of the City of Chino and the unincorporated area lying between the cities of Pomona, Chino Hills, Chino and Ontario.

### **Wastewater**

IEUA is responsible for providing wastewater collection and treatment services within the San Bernardino County Portion of the project area. The IEUA owns and operates a 66-mile regional interceptor system that collects and conveys wastewater from local sewers owned and operated by its member agencies, including the City of Chino. The IEUA has organized its service area into two portions: its Northern Service Area (NSA) and its Southern Service Area (SSA). The SSA encompasses the project site, and includes the City of Chino, Chino Hills, and portions of the City of Ontario (DC&E 2006). There are three regional treatment plants in Chino that serve Chino and its sphere of influence: Regional Plant-2 (RP-2), Regional Plant-5 (RP-5), and the Carbon Canyon Wastewater Reclamation Facility (CCWRF). Their combined current capacity is 55-million gallons per day (mgd), with planned facilities able to process 75 mgd (DC&E 2006).

The portions of the project area within unincorporated Riverside County are within the Jurupa Community Services District. Wastewater services within this district are provided by the Western Municipal Water District via the Western Riverside County Regional Wastewater Authority (WRCRWA) wastewater facility. The WRCRWA plant, a tertiary facility capable of providing reclamation water for reuse or for discharge through an outfall to the Santa Ana River, was brought online in 1998. It has a design capacity for eight million gallons per day (MGD) with the capability for expansion to 32 MGD.

### **2.16.2 Environmental Impacts and Mitigation Measures**

#### **a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? LESS THAN SIGNIFICANT IMPACT**

The project area is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB). Currently, the project site generates no wastewater because it is located either on undeveloped land, or land within existing and/or newly acquired SCE utility easements, public street rights-of-way, or at the proposed (Kimball) and existing (Archibald) substations.

Portable toilets provided for construction crews would be the only source of wastewater produced during construction activities. All portable toilets would be hauled off-site by the contractor and their contents would be disposed following all applicable regulations. No other wastewater would be generated during construction activities.

Upon completion of construction, the proposed project would not generate wastewater because the facilities would either be fully automated (substation) or would not contain inhabitable structures (subtransmission line modifications and telecommunication improvements). No wastewater would be generated during project operations. The proposed project would not exceed the wastewater treatment requirements of the Santa Ana RWQCB. A less than significant impact has been identified for this issue area.

**b. Would the project require, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? NO IMPACT**

As previously discussed, the proposed project would enhance electrical capacity and delivery in the Cities of Chino and Ontario and unincorporated Riverside County. Although the proposed project would increase the efficiency with which electricity is made available, the project would not provide a new source of electricity and would not induce population growth in the region. Therefore, the proposed project would not generate a significant additional direct or indirect demand for new or expanded water or wastewater treatment facilities. No impact has been identified for this issue area.

**c. Would the project require, or result in the construction of, new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? LESS THAN SIGNIFICANT IMPACT**

### **Substation**

As previously discussed, the proposed project would incrementally increase surface runoff due to the increase in impervious surfaces associated with the development of the proposed substation. The proposed project would incorporate drainage measures to divert runoff so that no adverse impacts would occur. Specifically, a 3-foot concrete swale would be constructed within the proposed substation site to divert runoff into a municipal storm drain that will be installed along Flight Street when the road is improved. The specifics of the improvements to Flight Street and the associated infrastructure are currently being finalized. However, drainage facilities associated with the improvements to Flight Street would connect to existing municipal drainage facilities along Kimball Avenue. The drainage needs of the proposed substation and the surrounding proposed industrial land uses would be incorporated into the ultimate design. A less than significant impact has been identified for this issue area.

### **Subtransmission and Telecommunication Alignments**

The proposed subtransmission line modifications and telecommunication improvements include the replacement of existing wood poles with new LWS poles. Since a minimal amount of area would be disturbed, construction activities associated with the pole replacements would not substantially alter any existing drainage patterns within the project site and therefore would not impact existing stormwater drainage facilities. Furthermore, the subtransmission line modifications and telecommunication improvements would comply with all applicable construction standards to ensure that existing drainage patterns would not be substantially altered and that stormwater would be conveyed offsite in a manner that would not require the construction of new stormwater drainage facilities or the expansion of existing facilities. A less than significant impact has been identified for this issue area.

**d. Would the project have sufficient water supplies available to serve the proposed project from existing entitlements and resources, or would new or expanded entitlements be needed? LESS THAN SIGNIFICANT IMPACT**

During construction, potable water usage at the project site would be limited to the mixing of cement and/or concrete, dust suppression activities, or the washing of construction equipment. However, this water would either be provided by tapping into existing municipal water mains or brought to the project site by truck. Therefore, no expansion of entitlements for water supplies would be required.

The proposed project includes the construction of an electric substation, the modification of subtransmission lines, and the installation of telecommunication infrastructure. No potable water would be required for the operation of the proposed project. Drought-resistant vegetation would be used to landscape the perimeter of the proposed substation, and would use water from municipal water mains for irrigation. The water usage is anticipated to be minimal given the limited size and scale of the landscaping. Therefore, a less than significant impact has been identified for this issue area.

**e. Would the project result in a determination by the wastewater treatment provider that serves or may serve the proposed project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments? NO IMPACT**

As previously discussed, the proposed project would not generate a significant demand for water or wastewater treatment because the facilities would either be fully automated or would not contain inhabitable structures. The proposed project would not generate additional demand for new water or wastewater facilities or the expansion of existing facilities. No impact has been identified for this issue area.

**f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs? LESS THAN SIGNIFICANT IMPACT**

The construction of the proposed substation could create relatively minor amounts of solid waste such as minor amount of debris cleared from the site leftover scraps of building materials. This material would be disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a RWQCB-certified municipal landfill. The extracted wood power poles associated with the transmission line improvements would be returned to the manufacturer.

The amount of construction waste associated with the proposed project is anticipated to be relatively small. The remaining capacity of the El Sobrante Landfill is noted above. The proposed project would therefore be served by a landfill with sufficient permitted capacity to accommodate the proposed project's solid waste disposal needs. A less than significant impact has been identified for this issue area.

**g. Would the project comply with federal, state, and local statutes and regulations related to solid waste? LESS THAN SIGNIFICANT IMPACT**

As outlined above, the construction of the proposed project would generate a relatively small amount of solid waste. The proposed project would be required to adhere to the 1989 Integrated Waste Management Act (IWMA), which requires all municipalities to divert 50 percent of their solid waste from landfill disposal through source reduction, recycling, and composting. According to the California Integrated Waste Management Board, the City of Chino is currently diverting approximately 61 percent of its solid waste (CIWMB 2007). The City of Ontario is diverting approximately 53 percent of its solid waste,

while the unincorporated portion of Riverside County within the project area (Norco) is diverting approximately 49 percent of its solid waste. Therefore, the municipalities within the project area are in compliance with the IWMA's mandatory 50 percent diversion rate. Moreover, the project would not put these municipalities out of compliance with IWMA's regulation. A less than significant impact has been identified for this issue area.

2.17 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>XVII. MANDATORY FINDINGS OF SIGNIFICANCE:</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? LESS THAN SIGNIFICANT IMPACT**

As detailed in Section 2.4, Biological Resources, the proposed project would not result in any significant impacts to biological resources with the incorporation of listed mitigation measures. Additionally, as detailed in Section 2.5, Cultural Resources, the proposed project would result in less than significant impacts to historical or archaeological resources with the incorporation of the identified mitigation measures. As indicated in the analyses undertaken in support of this IS/MND, implementation of the proposed project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Therefore, with the incorporation of biological and cultural resources mitigation measures, a less than significant impact has been identified.

- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.) LESS THAN SIGNIFICANT IMPACT**

CEQA defines a cumulative impact as an effect that is created as a result of the combination of the proposed project together with other projects (past, present, or future) causing related impacts. Cumulative impacts of a project need to be evaluated when the project’s incremental effect is cumulatively considerable and, therefore, potentially significant.

As previously discussed, the majority of the potential impacts of the proposed project would occur during construction and would be both temporary and localized in nature. Construction impacts associated with air quality, biological resources, hazards and hazardous materials, and traffic would be mitigated to less than significant levels. Construction impacts associated with all other issue areas have been identified as less than significant impact or no impact. Therefore, the potential for cumulatively considerable construction impacts to occur is considered limited.

From a cumulative perspective, the incremental visual effects of the proposed project are considered in combination with past visual changes in the area and anticipated changes from future projects. As outlined in the analysis, recent development trends across large portions of the project area have changed the visual character of the area substantially. As such, the incremental change in visual conditions associated with the proposed project would represent only minor change in cumulative conditions.

The proposed project would not result in any significant long-term impacts that would substantially combine with impacts of other current and probable future impacts. Consequently, the proposed project would not create impacts that are cumulatively considerable. Therefore, a less than significant impact is identified for this issue area.

- c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly? LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED**

Based upon the analysis conducted in Sections 2.1 through 2.16, implementation of the proposed project would not cause a substantial adverse effect on humans. Impacts identified for the proposed project relate to biological resources, air quality, hazards, hazardous materials, and transportation/traffic. However, mitigation measures have been included to reduce all significant impacts to below a level of significance.

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## Initial Study/Mitigated Negative Declaration

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- U.S. Environmental Protection Agency. 1972. *Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety*. U.S. Environmental Protection Agency Report 550/9-74-004. March.
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#### 4.0 ENVIRONMENTAL DETERMINATION

Determination: (To Be Completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project may have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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Signature

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Date

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Title

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Agency

## 5.0 LIST OF PREPARERS AND CONSULTATIONS

A consultant team headed by HDR Engineering prepared this document under the direction of the California Public Utilities Commission. The preparers and technical reviewers of this document are presented below.

### 5.1 LEAD AGENCY

#### **California Public Utilities Commission, Energy Division**

Michael Rosauer, Project Manager, Lead Agency Contact

### 5.2 PROJECT MANAGEMENT AND DOCUMENT PRODUCTION

#### **HDR Engineering – Prime Contractor**

Lloyd Zola, Principal in Charge  
Chuck Cleeves, Project Manager  
Clement Brown, Environmental Planner  
Connie Chen, Associate Environmental Planner  
Shannon Shea, Senior Biologist  
Melyssa Sheeran, Senior Environmental Planner  
Martin Watson, Senior Environmental Planner

### 5.3 PERSONS COSULTED

Hitz, Michael. Associate Planner for the City of Chino. Personal communication with Chuck Cleeves, HDR, Inc. November 6, 2007.

Page, Johanna. Biologist, Southern California Edison. Personal communication with HDR, Inc. July 3, 2007.

Pollock, Katherine. Archaeologist, Southern California Edison. Personal communication with HDR, Inc. March 5, 2009.

## 6.0 MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM

### 6.1 INTRODUCTION AND SUMMARY

This document describes a proposed mitigation monitoring reporting and compliance program (MMRCP) for ensuring the effective implementation of the mitigation measures required for the California Public Utilities Commission (CPUC) approval of the Southern California Edison (SCE) application for the proposed project, which consists of: (i) the construction of a 66/12 kilovolt (kV) substation (Kimball Substation) on an approximately 2-acre site located in the City of Chino; (ii) the modification of approximately 6.7 miles of the Chino-Corona-Pedley 66 kV subtransmission line and construction of two 340-foot underground 66 kV subtransmission lines that will connect Kimball Substation through a tubular steel pole (TSP) riser to an existing 66 kV overhead transmission line; (iii) the addition of a second 66 kV subtransmission line circuit to an approximately 0.9 mile segment of the Archibald-Chino-Corona 66 kV subtransmission line and construction of a new 0.4 mile segment within public street rights-of-way to connect the Chino-Corona-Pedley 66 kV line to the Archibald-Chino-Corona 66 kV line (these modifications would form the new Chino-Cimgen-Kimball 66 kV subtransmission line); (iv) construction of six 12 kV underground circuits extending from the proposed Kimball Substation to the nearest public street; and (v) installation of new fiber optic cable and communication equipment to connect the Kimball Substation to SCE's existing telecommunication system. Within SCE's application, Applicant Proposed Measures (APMs) were proposed to reduce potentially significant adverse impacts related to project construction and operation. All mitigation measures and APMs are presented in Table 6-1 provided at the end of this MMRCP. If the project is approved, the MMRCP should serve as a self-contained general reference for the Mitigation Monitoring Program adopted by the Commission for the project. If and when a project has been approved by the Commission, the CPUC will compile the Final Plan from the Mitigation Monitoring Program in the Final MND, as adopted.

#### **California Public Utilities Commission – MMRCP Authority**

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a MMRCP when it approves a project that is subject to preparation of a Mitigated Negative Declaration and where the MND for the project identifies potentially significant environmental effects. CEQA Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring and reporting. The purpose of a MMRCP is to ensure that measures adopted to mitigate or avoid significant impacts of a project are implemented. The CPUC views the MMRCP as a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance and reporting activities of the CPUC and any monitors it may designate.

The Commission will address its responsibility under Public Resources Code Section 21081.6 when it takes action on SCE's application for a Certificate of Public Convenience and Necessity. If the Commission approves the application, it will also adopt a Mitigation Monitoring, Compliance, and Reporting Program that includes the mitigation measures ultimately made a condition of approval by the Commission.

## 6.2 PROJECT DESCRIPTION

The Kimball Substation Project (proposed project) contains the following components:

- Construction of a new 66/12 kilovolt (kV) substation. The proposed substation would be constructed on an approximately 2-acre site in the City of Chino, California. The proposed substation would be an unmanned, automated, low-profile, 56 megavolt-ampere (MVA) 66/12 kV substation. The proposed substation would include underground distribution circuits leaving the substation, a perimeter wall surrounding the substation equipment with a gate to provide access in and out of the substation, and an access road to the substation from the public road.
- Modification of approximately 6.7 miles of the existing Chino-Corona-Pedley 66 kV subtransmission line and the construction of two new 340-foot long underground circuits to extend the Chino-Corona-Pedley line into the proposed substation. The existing lines to be modified are located in either SCE-owned rights-of-way or public street rights-of-way. Along approximately 5.6 miles of the line, the existing wood poles would be replaced with lightweight steel (LWS) poles and the conductor would be replaced. Along approximately 1.1 miles of the line, the conductor would be replaced on existing LWS poles. These modifications would form the new Chino-Kimball 66 kV subtransmission line.
- Addition of a second circuit to an approximately 0.9 mile segment of the existing Archibald-Chino-Corona 66 kV subtransmission line and construction of a new 0.4 mile segment within public street rights-of-way to connect the Chino-Corona-Pedley 66 kV line to the Archibald-Chino-Corona 66 kV line. These modifications would form the new Chino-Cimgen-Kimball 66 kV subtransmission line.
- Construction of six 12 kV underground circuits extending from the proposed substation to the nearest public street.
- Installation of new fiber-optic cable and communication equipment to connect the proposed Kimball Substation to SCE's existing telecommunication system.

Because the CPUC must decide whether or not to approve the SCE application and because the application may cause either direct or reasonably foreseeable indirect effects on the environment, the California Environmental Quality Act (CEQA) requires the CPUC to consider the potential environmental impacts that could occur as the result of its decisions and to consider mitigation for any identified significant environmental impacts.

If the CPUC approves SCE's application for authority to construct and operate the substation and transmission lines, SCE would be responsible for implementation of any mitigation measures governing both construction and future operation of the transmission line and substations. Though other state and local agencies would have permit and approval authority over the construction transmission line, the CPUC would continue to act as the lead agency for monitoring compliance with all mitigation measures required by this Draft MND. All approvals and permits obtained by SCE would be submitted to the CPUC for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained.

In accordance with CEQA, the CPUC reviewed the impacts that would result from approval of the application. The activities considered include the construction of the new Kimball substation and transmission line modifications, and the future operation of the transmission line and substations. The CPUC review concluded that all potential impacts could be mitigated to less than significant levels. SCE

has agreed to incorporate all the proposed mitigation measures into the project. The CPUC has included the stipulated mitigation measures as conditions of approval of the application and has circulated a Draft MND.

The attached Mitigated Negative Declaration presents and analyzes potential environmental impacts that would result from construction and operation of the new transmission line and substation modifications, and proposes mitigation measures, as appropriate. Based on the Mitigated Negative Declaration, approval of the application would have no impact or less than significant impacts in the following areas:

- Agricultural Resources
- Mineral Resources
- Population and Housing
- Land Use and Planning Mandatory
- Noise
- Public Services
- Utilities

The Draft Mitigated Negative Declaration indicates that approval of the application would result in potentially significant impacts in the areas of:

- Mandatory Findings of Significance
- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hydrology and Water Quality
- Hazards and Hazardous Materials
- Transportation and Traffic

### 6.3 ROLES AND RESPONSIBILITIES

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures and Applicant Proposed Measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this MMRCP and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the Program. The CPUC has the authority to halt any activity associated with the proposed project if the activity is determined to be a deviation from the approved project or the adopted mitigation measures. The CPUC may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The CPUC will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

The CPUC, along with its mitigation monitor, will ensure that any variance process or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant environmental impacts. As defined in this MMRCP, a variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A proposed project change that

has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project and adopted mitigation measures, including correction of such deviation, shall be reported immediately to the CPUC and the mitigation monitor assigned to the construction for their review and approval. In some cases, a variance may also require approval by a CEQA responsible agency.

### **Enforcement and Responsibility**

The CPUC is responsible for enforcing the procedures for monitoring through the environmental monitor. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC may assign its authority to their environmental monitor.

### **Mitigation Compliance Responsibility**

SCE is responsible for successfully implementing all the adopted mitigation measures in this MMRC. The MMRC contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

SCE shall inform the CPUC and its mitigation monitor in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC in coordination with its mitigation monitor will assess whether alternative mitigation is appropriate and specify to SCE the subsequent actions required.

### **Dispute Resolution Process**

This MMRC is expected to reduce or eliminate many of the potential disputes concerning the implementation of the adopted measures. However, in the event that a dispute occurs, the following procedure will be observed:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.
- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring Program.
- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMRC or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.

- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure for formal and expedited.

### 6.4 GENERAL MONITORING PROCEDURES

#### **Mitigation Monitor**

Many of the monitoring procedures will be conducted during the construction phase of the project. The CPUC and the mitigation monitor are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with SCE. To oversee the monitoring procedures and to ensure success, the mitigation monitor assigned to the construction must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The mitigation monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

#### **Construction Personnel**

A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the MMRCP, will be taken:

- Procedures to be followed by construction companies hired to do the work will be written into contracts between SCE and any construction contractors. Procedures to be followed by construction crews will be written into a separate agreement that all construction personnel will be asked to sign, denoting agreement.
- One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the MMRCP.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

#### **General Reporting Procedures**

Site visits and specified monitoring procedures performed by other individuals will be reported to the mitigation monitor assigned to the construction. A monitoring record form will be submitted to the mitigation monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the mitigation monitor. A checklist will be developed and maintained by the mitigation monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The mitigation monitor will note any problems that may occur and take appropriate action to rectify the problems. SCE shall provide the CPUC with written quarterly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Quarterly reports shall be required as long as mitigation measures are applicable.

### 6.5 PUBLIC ACCESS TO RECORDS

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request. The CPUC and SCE will develop a filing and tracking system.

### 6.6 CONDITION EFFECTIVENESS REVIEW

In order to fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design a MMRCP to ensure compliance during project implementation (CEQA 21081.6):

- The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined above; and
- If in either review, the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

### 6.7 MITIGATION MONITORING AND REPORTING PROGRAM

The table attached to this program presents a compilation of the mitigation measures in the Draft Mitigated Negative Declaration. The purpose of the table is to provide a single comprehensive list of mitigation measures, effectiveness criteria, and timing.

The mitigation matrix is included in Table 6-1.

**Table 6-1. Mitigation Monitoring and Reporting Program Checklist**

Environmental Impact	Applicant Proposed Measures (APM) or Mitigation Measure	Implementation Action	Monitoring/ Reporting Requirements	Monitoring Schedule
<i>Aesthetics</i>				
Implementation of the proposed project would substantially degrade the existing visual character or quality of the site and its surroundings.	MM Aes1: The substation shall be screened behind an 8-foot high perimeter wall with exterior drought tolerant landscaping.	SCE and/or its contractor(s) to implement measure as defined.	CPUC to review landscaping plans and inspect project site.	During project design and after project completion.
	APM Aes1: Structures associated with the proposed substation would incorporate low profile design features that would limit the height of the electrical equipment to approximately 17 feet.	SCE and/or its contractor(s) to implement measure as defined.	CPUC to review design drawings and inspect and project site.	During project design and after project completion.
<i>Air Quality</i>				
Under state and federal standards, the proposed project is located in a non-attainment area for O <sub>3</sub> , PM <sub>10</sub> , and PM <sub>2.5</sub> . Implementation of the proposed project would contribute substantially to an existing air quality violation.	MM Air1: SCE shall prepare a Construction Emissions Control Plan that outlines SCE's approach for ensuring that daily construction emissions do not exceed the SCAQMD's significance thresholds for construction activities. The plan shall be submitted to the CPUC for review and approval at least 30 days prior to the estimated start of construction activities. SCE shall require the approved plan to be implemented during all construction activities. The plan shall include, at a minimum, the following requirements: <ul style="list-style-type: none"> <li>A detailed description of construction activity phasing that would be required to ensure that emissions remain below SCAQMD daily significance thresholds. All assumptions and rationale for all assumptions, including truck trips per day, miles per trip, daily equipment inventories, equipment hours, and amounts of total areas and volumes of material to be</li> </ul>	SCE and/or its contractor(s) to submit Plan to CPUC and implement measure as defined.	CPUC to review Plan and regularly inspect project site.	Prior to and during construction.

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	<p>disturbed shall be defined in the plan.</p> <ul style="list-style-type: none"> <li>• All construction material deliveries shall be scheduled to occur outside of peak traffic hours (7:00 to 10:00 a.m. and 4:00 to 7:00 pm) to the extent feasible; truck trips during peak traffic hours shall be minimized to the extent feasible.</li> <li>• Engine idle time shall be restricted to no more than five minutes in duration.</li> <li>• All on-road construction vehicles shall be licensed.</li> <li>• All off-road stationary and portable gasoline powered equipment shall have USEPA Phase 1/Phase 2 compliant engines.</li> </ul>			
	<p>APM Air1: Idling time will be limited to a maximum of five minutes when construction equipment is not in use per Section 2449(d)(3) of Title 13, Article 4.8, Chapter 9 of the California Code of Regulations (CCR).</p>	SCE and/or its contractor(s) to implement measure as defined.	CPUC to regularly inspect project site.	During construction.
	<p>APM Air2: SCE will prepare and implement specific fugitive dust control measures pursuant to SCAQMD Rule 403.</p>	SCE and/or its contractor(s) to implement measure as defined.	CPUC to regularly inspect project site.	During construction.
Implementation of the proposed project has the potential to produce odors during construction.	<p>APM Air3: SCE will reduce odors associated with diesel exhaust by the use of either low-sulfur or ultra-low sulfur fuel</p>	SCE and/or its contractor(s) to implement measure as defined.	CPUC to regularly inspect project site.	During construction.

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Implementation of the proposed project would result in potentially significant GHG emissions.	MM GHG1: SCE shall replace a circuit breaker with an SF6 capacity of at least 30 pounds that is estimated to be leaking at a rate of at least six percent of its SF6 content each year. At the time of replacement, the circuit breaker to be replaced shall have an expected remaining life of at least two additional years. The replacement breaker shall have a one percent leakage rate guaranteed by manufacturers. SCE shall provide documentation to the CPUC that verifies that the replacement has occurred prior to commencement of project operations, and that the replaced circuit breaker has been permanently removed from service (e.g., destroyed or recycled as scrap metal).	SCE and/or its contractor(s) to implement measure as defined and submit verification documentation to CPUC.	CPUC to review verification document.	Prior to project operation.
	MM GHG2: Prior to the commencement of operations of the Kimball Substation project, SCE shall replace four diesel powered forklifts that have horsepower (hp) ratings of at least 50 hp with electric forklifts. SCE shall provide documentation to the CPUC that verifies the replacement has occurred, and that the replaced forklifts have been permanently removed from SCE's equipment inventory.	SCE and/or its contractor(s) to implement measure as defined and submit verification documentation to CPUC.	CPUC to review verification document.	Prior to project operation.
<i>Biological Resources</i>				
Implementation of the proposed project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS).	MM Bio1: If construction activities are to occur during the nesting season (February 1 through August 31), a preconstruction survey shall be conducted by a qualified biologist at least one week prior to the commencement of construction activities to determine the presence/absence of active nests on the construction site. If an active nest is found, an adequate buffer shall be established around the nest and construction shall be prohibited within this designated area until the juveniles	SCE and/or its contractor(s) to implement measure as defined; Submit preconstruction survey results for nesting birds and buffer plans to the CPUC.	CPUC to review survey results; inspect project site regularly.	During nesting and breeding season; Prior to and during construction.

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Environmental Impact	Applicant Proposed Measures (APM) or Mitigation Measure	Implementation Action	Monitoring/ Reporting Requirements	Monitoring Schedule
Implementation of the proposed project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	<p>fledge. Construction buffers of 300 feet would only apply to the portion of the project site where the active nest is located. If vegetation or structures containing a raptor nest must be removed during the nesting season, or if work is scheduled to take place in close proximity to an active nest in vegetation or an existing structure, SCE would coordinate with the CDFG and USFWS and obtain written concurrence prior to moving the nest. Construction activities may continue within the project site if the activities take place outside of the designated buffer. (In practice, the presence of an active nest on the proposed substation site would halt construction of the substation because the buffer would incorporate the entire site; however, an active nest located within the alignment would only halt construction within a specific portion of the alignment.)</p>			
	<p>MM Bio2: All new structures shall be designed to be raptor safe in accordance with current standards and guidelines.</p>	<p>SCE and/or its contractor(s) to implement measure as defined; Provide design drawings to CPUC.</p>	<p>CPUC to review design drawings.</p>	<p>During project design.</p>
	<p>MMBio3: A preconstruction burrowing owl survey shall be conducted no more than 30 days prior to the commencement of ground disturbing activities along the segment of the alignment that parallels Magnolia Avenue between Edison and Kimball Avenues to determine if any occupied burrows are present. If nesting pairs are found, adequate buffers shall be established around occupied burrows (50 meters/160 feet) from non-breeding burrows and 75 meters (250 feet) from breeding burrows) during the breeding season (February 1-August 31). If active burrows</p>	<p>SCE and/or its contractor(s) to implement measure as defined; Submit preconstruction survey results for burrowing owl and buffer plans to the CPUC.</p>	<p>CPUC to review survey results; inspect project site regularly.</p>	<p>Prior to and during construction.</p>

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	cannot be avoided, an appropriate relocation strategy would be developed in conjunction with the CDFG and may include: collapsing burrows outside of nesting season and the use of exclusionary devices to reduce impacts to the burrowing owl.			
<i>Cultural Resources</i>				
Implementation of the proposed project may encounter currently unknown cultural resources, either prehistoric or historic, pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g).	<p>MM Cul1: In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and SCE and/or the CPUC shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of SCE and/or the CPUC and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, as necessary and a report prepared by a Specialist according to current professional standards.</p> <p>In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeologist resources, the CPUC shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, proposed project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g. data recovery) shall be instituted. Work may</p>	Qualified archaeologist to implement measure as defined; Consult CPUC; submit summary report to CPUC.	CPUC to consult with qualified archaeologist; Review summary report.	During construction; Immediately upon discovery of cultural resource.

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	<p>proceed on other parts of the proposed project site while mitigation for historical resources of unique archaeological resources is carried out.</p> <p>If the CPUC, in consultation with the qualified archaeologist, determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, the CPUC shall require SCE to:</p> <ul style="list-style-type: none"> <li>• Re-design the proposed project to avoid any adverse effect on the significant archeological resource; or</li> <li>• Implement an archeological data recovery program (ADRP) unless the qualified archaeologist determines that the archeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical</li> </ul>			

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	<p>research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.</p>			
<p>Implementation of the proposed project may result in accidental discovery of human remains.</p>	<p>MM Cul2: If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 dictates that no further disturbance would occur until the County Coroner has made the necessary findings as to origin and disposition of the remains pursuant to Public Resources Code Section 5097.98.</p> <p>Should human remains be identified as a Native American burial, the Native American Heritage Commission shall be contacted to determine the appropriate repatriation efforts.</p>	<p>SCE and/or its contractor(s) to provide immediate verbal notification to the County Coroner and the CPUC of any discovered human remains; Provide follow up written documentation noting date of discovery, type of discovery, and action taken to protect the resource(s); Contact NAHC.</p>	<p>CPUC to review summary report.</p>	<p>During construction; Immediately upon discovery of cultural resource.</p>
<i>Geology and Soils</i>				
<p>Implementation of the proposed project would result in an estimated level of soil disturbance greater than one acre resulting in impacts associated with soil erosion and loss of topsoil.</p>	<p>MM Geo1: The applicant shall obtain a National Pollutant Discharge Elimination System (NPDES) permit and prepare a Storm Water Pollution Prevention Plan (SWPPP) which meets the requirements of the Santa Ana Regional Water Quality Control Board. Specific erosion</p>	<p>SCE to submit copy of NPDES permit and SWPPP to CPUC; Implement measures as defined.</p>	<p>CPUC to review NPDES permit and SWPPP; Monitor the project site regularly.</p>	<p>Prior to and during construction.</p>

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	<p>control measures would be outlined in the NPDES permit and SWPPP and would be required to be in place prior to the commencement of grading activities.</p> <p>The standard erosion control measures outlined in the NPDES permit and SWPPP would be required during surface and subsurface construction activities associated with the subtransmission and telecommunication alignments (e.g., grading, boring of holes for the LWS poles; burying of underground conductors; and TSP riser and vault installation) would reduce the erosion potential of the minor quantities of excavated soil.</p> <p>The permit shall be required prior to construction and submitted to the CPUC.</p>			
	<p>APM Geo1: The electrical equipment associated with the proposed substation would be constructed in accordance with the Institute of Electrical and Electronics Engineers (IEEE) Recommended Practices for Seismic Design of Substations.</p>	SCE and/or its contractor(s) to implement measure as defined.	CPUC to review engineering plans for substation.	During project design.
<b><i>Hazards and Hazardous Materials</i></b>				
Implementation of the proposed project would result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	<p>MM Haz1: The design of the proposed substation shall provide containment and/or diversionary structures or equipment to prevent the discharge of oil or other hazardous material. These design features shall be included as part of the Spill Prevention Control and Countermeasure (SPCC) requirements (40 Code of Federal Regulations (CFR) Part 112.1 through Part 112.7) that would be prepared by SCE prior to construction of the substation and submitted to the CPUC.</p>	SCE and/or its contractor(s) to submit copy of SPCC Plan to CPUC; implement measures as defined.	CPUC to review SPCC; Monitor site regularly.	Prior to construction.

## Initial Study/Mitigated Negative Declaration

Environmental Impact	Applicant Proposed Measures (APM) or Mitigation Measure	Implementation Action	Monitoring/ Reporting Requirements	Monitoring Schedule
	<p>APM Haz1: Hazardous or flammable materials used during construction would consist primarily of vehicle fuels (gasoline and diesel), oil, grease, and other fluids (hydraulic fluid, antifreeze, and transmission fluid) associated with construction equipment. Liquid concrete would also be used during construction. To avoid the inadvertent release of these materials (and to ensure proper response protocols), SCE would be required to implement environmental training for its field personnel.</p>	SCE and/or its contractor(s) to implement measure as defined; Provide CPUC documentation of training.	CPUC to review training documentation.	Prior to construction.
Implementation of the proposed project would create a significant hazard to the public or the environment.	<p>MM Haz2: In the event that contaminated soil is encountered during excavation activities along the subtransmission and/or telecommunication alignments, the soil shall be segregated and tested to determine the appropriate disposal and treatment options. Should a soil test positive for hazardous materials, the soil shall be properly transported to a Class I landfill or other appropriate soil treatment or recycling facility.</p> <p>The wooden poles to be removed as part of the subtransmission line modifications shall be either returned to the manufacturer, disposed of in a Class I hazardous waste landfill, or disposed of in the lined portion of a Regional Water Quality Control Board (RWQCB)-approved municipal landfill.</p>	SCE and/or its contractor(s) to implement measure as defined; Submit documentation to CPUC that soil (if applicable) and pole disposal has occurred according to regulation.	CPUC to review documentation of soil (if applicable) and pole disposal.	During construction.
Implementation of the proposed project would result in a safety hazard for people residing or working in the project area.	<p>MM Haz3: Coordination with the FAA would be required during construction to ensure compliance with FAA obstruction standards (FAR 77.11 guidelines).</p>	SCE and/or its contractor(s) to provide documentation of FAA compliance.	CPUC to review compliance documentation.	During construction.
	<p>MM Haz4: FAA notification would be required for the LWS pole installation along the portion of the alignment of the subtransmission modifications within the airport's southwest- to</p>	SCE and/or its contractor(s) to provide documentation of FAA notification.	CPUC to review notification documentation.	During construction.

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Environmental Impact	Applicant Proposed Measures (APM) or Mitigation Measure	Implementation Action	Monitoring/ Reporting Requirements	Monitoring Schedule
	northeast-oriented take-off zone, approximately 2,650 feet from the end of the runway to ensure compliance with FAA obstruction standards (FAR 77.11 guidelines).			
Implementation of the proposed project would potentially expose people or structures to a significant risk of loss, injury, or death involving wildland fires.	<p>APM Haz 2: During operation, the project subtransmission lines may pose a fire hazard if vegetation or other obstructions come in contact with energized conductor. The proposed project would be constructed and maintained in a manner consistent with CPUC G.O. 95 and CPUC G.O. 165. Consistent with these and other applicable state and federal laws, SCE would maintain an area of cleared brush around the conductor, minimizing the potential for fire. Further, the applicant would work with developers along this route to insure that trees in proximity to the proposed line will not exceed 15 feet in height. The project site is not located in a designated wildland fire hazard zone. To prevent heat or sparks from vehicles or construction equipment from igniting dry vegetation and causing a fire, SCE will be responsible for clearing work areas of flammable vegetation to reduce the potential for fires and to direct workers to park vehicles away from dry vegetation. Incorporation of these construction site best management practices (BMPs) would prevent the proposed project from exposing people or structures to a significant risk of fire.</p>	SCE and/or its contractor(s) to implement measure as defined.	CPUC to monitor project site regularly.	During operation.
<i>Hydrology and Water Quality</i>				
Implementation of the proposed project would impact water quality standards.	Refer to MM Geo1	SCE to submit copy of NPDES permit and SWPPP to CPUC; Implement measures as defined.	CPUC to review NPDES permit and SWPPP; Monitor the project site regularly.	Prior to and during construction.

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Environmental Impact	Applicant Proposed Measures (APM) or Mitigation Measure	Implementation Action	Monitoring/ Reporting Requirements	Monitoring Schedule
Implementation of the proposed project would substantially degrade water quality	Refer to MM Geo1	SCE to submit copy of NPDES permit and SWPPP to CPUC; Implement measures as defined.	CPUC to review NPDES permit and SWPPP; Monitor the project site regularly.	Prior to and during construction.
<i>Noise</i>				
	APM Noise 1: SCE will comply with noise standards established by local municipalities, including regulations limiting construction hours. If construction must take place outside of normal business hours, SCE will apply for a variance with the appropriate jurisdiction to allow construction noise levels to exceed their established thresholds. SCE will comply with the terms of any variance that may be granted.	SCE and/or its contractor(s) to implement measure as defined; If applicable, obtain and submit copy of variance document to CPUC.	CPUC to monitor site regularly; Review variance document.	During construction.
<i>Traffic and Transportation</i>				
<p>Implementation of the proposed project would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system.</p> <p>Implementation of the proposed project would exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.</p> <p>Implementation of the proposed project would result in inadequate emergency access.</p>	<p>MM Traffic1: SCE shall implement a Traffic Control Plan (TCP) to limit potential traffic impacts to the project area. Specifically, the measures outlined in the TCP will ensure an adequate flow of traffic in both directions by providing sufficient signage to alert drivers of construction zones, notifying emergency responders prior to construction, conducting community outreach, and controlling traffic around schools. The measures shall include the following:</p> <ul style="list-style-type: none"> <li>• To the extent feasible, truck traffic shall be scheduled for off-peak hours to reduce impacts during periods of peak traffic.</li> <li>• Truck traffic shall be phased throughout the five-week grading period and site preparation construction phase.</li> </ul>	SCE and/or its contractor(s) to implement measure as defined; Submit TCP to CPUC.	CPUC to review TCP	Prior to Construction.

## Initial Study/Mitigated Negative Declaration

Environmental Impact	Applicant Proposed Measures (APM) or Mitigation Measure	Implementation Action	Monitoring/ Reporting Requirements	Monitoring Schedule
	<ul style="list-style-type: none"> <li>• Truck traffic shall use designated truck routes when arriving to and from the proposed substation site.</li> <li>• If lane closures are required, SCE shall comply with BMPs established by the Work Area Protection and Traffic Control Manual (California Joint Utility Traffic Control Committee 1996). All work within public roadway rights-of-way shall be subject to the conditions established by the appropriate jurisdiction in an encroachment permit to be secured prior to initiating work within the right-of-way.</li> </ul>			
Implementation of the proposed project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Refer to MM Haz3 and MM Haz4	SCE and/or its contractor(s) to provide documentation of FAA compliance.	CPUC to review compliance documentation.	During construction.
Implementation of the proposed project would result in a temporary short term impact to the circulation network during construction if Flight Street has not yet been improved.	APM Traffic1: In the event that the improvements to Flight Street have not been made prior to construction of the substation, a temporary access road would be graded and installed. The temporary access road would be built based on the site's topography, so that it would be accessible to all construction vehicles and equipment. This temporary access road would be built with gradients and curvatures that would permit heavy equipment usage and maneuvering.	SCE and/or its contractor(s) to submit design plans to CPUC; Implement measure as defined.	CPUC to review design plans.	Prior to construction.

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