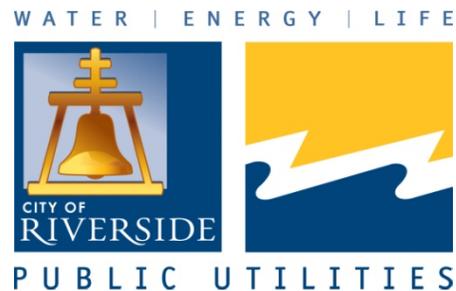


Initial Study / Proposed Mitigated Negative Declaration

Subtransmission Project (STP)

Riverside, California



Riverside Public Utilities
3901 Orange Street
Riverside, California 92501

February 2009

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TECHNICAL APPENDIX

(Bound as a separate document)

- Appendix A 69 kV Subtransmission Network Report – Review of Existing System (8/2007)
- Appendix B Air Quality – Construction Emissions
- Appendix C Visual Simulations
- Appendix D Environmental Hazards FirstSearch Report
- Appendix E Preferred Alternative Route Selection Process

ABBREVIATIONS AND ACRONYMS

AQMP	Air Quality Management Plan
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CAISO	California Independent System Operator
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
DFR	Digital Fault Recorder
EPA	Environmental Protection Agency
IS	Initial Study
kV	Kilovolt
MND	Mitigated Negative Declaration
MSHCP	Multiple Species Habitat Conservation Plan
MSL	Mean Sea Level
MW	Mega Watts
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
RCRA	Resource Conservation and Recovery Act
RM	Resource Management
ROC	Reactive Organic Compounds
RPU	Riverside Public Utilities
RWQCB	Regional Water Quality Control Board
SAS	Substation Automation Systems
SCE	Southern California Edison
SR	State Route
STP	Subtransmission Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resource Control Board
UCR	University of California at Riverside
USGS	United States Geological Survey

1.0 INTRODUCTION

The following discussion of potential environmental effects was completed in accordance with Section 15063(d) (3) of the California Environmental Quality Act (CEQA) Guidelines (2008) to determine if the project may have a significant effect on the environment.

CEQA INITIAL STUDY FORM

1. **Project title:** Subtransmission Project (STP)
2. **Lead agency name and address:**
City of Riverside (City)
3900 Main Street
Riverside, CA 92522
3. **Contact person and phone number:**
Jorge Somoano, Project Manager – Principal Engineer
(951) 826-5411
4. **Project location:** City of Riverside, County of Riverside, CA - See Section 2.4 of this document.
5. **Project sponsor's name and address:**
Riverside Public Utilities (RPU)
3901 Orange Street
Riverside, CA 92501
6. **General plan designation:**
The proposed 69 kilovolt (kV) subtransmission lines would be within: (1) existing utility easements, (2) roadway rights-of-ways, (3) on private or state lands within linear open space, (4) adjacent to existing easements or rights-of-way, or (5) within widening or expansion of existing easements. Within the City of Riverside, general plan designations along or adjacent to the proposed route include: Public Facilities/Institutional (PF), Commercial (C), Industrial (I), Medium Density Residential (MDR), Medium High Density Residential (MHDR), and Mixed Use-Urban (MU-U).

Over the years, the City has adopted a number of Specific Plans. Under State law, specific plans provide detailed land use and infrastructure plans and policies for a certain geographic area. Specific plans must be consistent with a community's General Plan. The Riverside General Plan 2025 more recently reflects the land use and urban design objectives and policies for the project area.

Within the University of California, Riverside West Campus land use categories along or adjacent to the proposed route include: Campus Reserve, Open Space, Campus Support, Parking, and Agricultural Teaching and Research Fields.

7. Zoning:

Within the City of Riverside, zoning districts along or adjacent to the proposed route include: Commercial Retail (CR), General Industrial (I), Single-family Residential (R-1-7000), Multiple-Family Residential (R-3-1500), Commercial General (CG), Public Facilities (PF), and Single-family Residential (R-1-8500)

8. Description of project: See Section 2.0 of this document.

9. Surrounding land uses and setting:

The proposed project is located southeast of downtown Riverside, California. The proposed project, for the most part, is situated in the Eastside and University Neighborhood Areas. Land uses in the project area are primarily single-family residential and institutional (University of California, Riverside West Campus). Lesser amounts of multi-family, public park, commercial, industrial, agriculture, with some vacant/open space areas are also found. Limited commercial uses are found along major streets. University Avenue is the primary corridor between the campus and downtown Riverside, and includes auto-oriented retail, fast food outlets, motels, restaurants and small shopping centers. Martin Luther King Boulevard and Blaine Avenue/Third Street also provide linkages from the campus to the downtown area.

Development is generally one or two stories in height. University Village is located on the north side of University, between Iowa Avenue and west of I-215/SR-60. University Village was built through a partnership of a private developer, the City of Riverside Redevelopment Agency and the University, it is a mixed-use development that includes theatres, restaurants, office and commercial uses, student apartments (newly constructed), a parking structure and surface parking. Grand Marc, also built by a private developer, is a large student housing complex located west of University Village.

10. Other public agencies whose approval is required: See Section 2.8 of this document.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the description of each environmental factor within Section 3 of this document.

	Aesthetics
	Agriculture Resources
	Air Quality
	Biological Resources
	Cultural Resources
	Geology/Soils
	Hazards & Hazardous Material
	Hydrology/Water Quality
	Land Use Planning
	Mineral Resources
	Noise
	Population/Housing
	Public Services
	Recreation
	Transportation/Traffic
	Utilities/Service Systems
	Mandatory Findings of Significance

DETERMINATION

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.
X	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 or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Feb. 17, 2009

Signature

Date

Dave Wright, Riverside Public Utilities General Manager

2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

Retail electric service for customers in the City of Riverside is provided by the Riverside Public Utilities Department (RPU). Energy is delivered to RPU through the regional bulk transmission system owned in part by Southern California Edison Company (SCE) and operated by the California Independent System Operator (CAISO).

RPU provides electric power and water for over 100,000 and 60,000 customers, respectively, within the 81.5 square mile city limits. RPU's Board of Public Utilities is made up of nine City Council-appointed citizens and is charged with governing utility policies and representing the community. Riverside is the largest city in Riverside County, one of the fastest growing counties in the United States. The rapid population growth and commercial development have led to an increase in local electric customers and in their use of electric energy.

RPU has been challenged to provide a safe and reliable energy supply and grid infrastructure. RPU's electrical peak demand has grown by 40% since the last major addition to the RPU electrical subtransmission system in 1996. The internal subtransmission system has not kept up with the load growth. During peak load periods (peak demand), the system can experience severe overloads and low-voltage conditions and needs to be reinforced.

In the long-term, many of RPU's reliability concerns will substantially be resolved by the proposed Riverside Transmission Reliability Project (RTRP). The RTRP will provide a much-needed second transmission interconnection with the California ISO power grid and an associated increase in capacity. The RTRP will also include work on the 69,000-volt (69 kilovolt, or 69 kV) subtransmission lines directly connected to the proposed interconnection with the state power grid, which are needed to distribute power through the RPU system.

In the short-term, however, RPU must resolve critical infrastructure and capacity deficiencies in the eastern part of its 69 kV subtransmission network in order to maintain reliable electric service. Initially, RPU had planned to address the required subtransmission line reinforcements in the eastern part of the City as part of the RTRP. However, due to delays and load growth, the RTRP will not be completed in time to alleviate the problem. Given that the need to address these deficiencies is independent of the RTRP, RPU proposes, through this project, to construct and upgrade 69 kV lines and associated equipment in order to reinforce the existing 69 kV subtransmission network on the eastern side of its system.

2.2 DESCRIPTION OF AN ELECTRICAL SYSTEM

Electric energy can be produced from different sources in a number of ways, but typically it is produced at large power generating plants, usually at some distance from consumers. The power plants are typically connected to a regional electrical system, comprised of high voltage transmission lines and substations which normally operate at 230 kV and higher. Large power transformers in electrical substations “step down” or reduce the transmission voltage so that the energy can then flow through subtransmission lines, such as the 69 kV lines that make up the RPU network, to distribution substations. At the distribution substations the voltage is again stepped down via power transformers to a lower voltage, typically 12 kV, to which a number of distribution circuits are connected. The energy then flows through one of these distribution circuits to a transformer located at or near the final consumer where it is stepped down to voltages generally between 120 and 480 volts for the end user. Figure 2-1 illustrates the components of a typical electrical system from power plant to customer.

DESCRIPTION OF AN ELECTRICAL SYSTEM

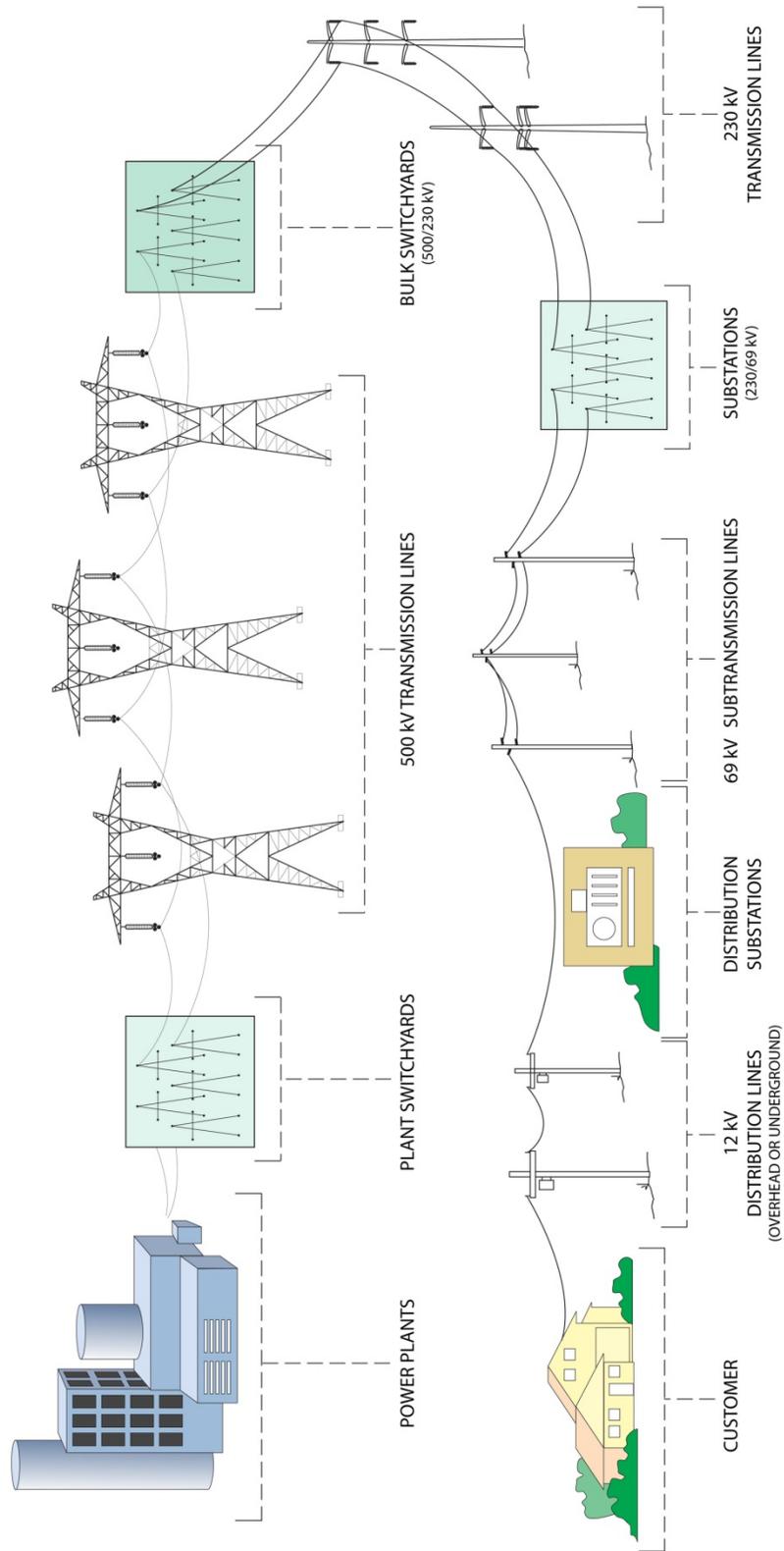


FIGURE 2-1 DESCRIPTION OF A TYPICAL ELECTRICAL SYSTEM



SUBTRANSMISSION PROJECT

2.3 RPU ELECTRICAL SYSTEM

SCE transmits a majority of the City of Riverside's electric power supply from two 230 kV to 69 kV transformers through the existing Vista Substation, located in the City of Grand Terrace, then into RPU's 69 kV network via seven 69 kV subtransmission lines. The RPU network is comprised of 15 separate substations linked by a network of twenty-two 69 kV lines, including the seven lines from the SCE Vista Substation, plus three additional 33 kV lines. Each substation transforms the energy from 69 kV or 33 kV to 12 kV or 4 kV for distribution to RPU customers, via 12 kV and 4 kV circuits. Figure 2-2 illustrates the existing RPU subtransmission network. The last major addition to the 69 kV network based on the RPU Planning Criteria was in 1996 with the completion of the Vista – Freeman 69 kV line.

While a majority of energy is imported from SCE's bulk power system at Vista Substation, RPU has recently constructed two "peaking" power plants within the City. Peaking power plants are designed and permitted by government agencies to operate a limited number of hours per year, normally only when there is a high demand for electricity, such as during summer months. The Springs Generation Project (Springs) was placed online in July 2002. The Riverside Energy Resource Center (RERC) was placed online in June 2006. The peaking plants have net generating capabilities of 32 megawatts (MW) and 96 MW, respectively. RPU plans to construct additional RERC units which will add another 96 MW of generation internal to its system.

2.4 PROJECT LOCATION

The Project is located in an area of Southern California referred to as the Inland Empire. The Project area is located in the northwest corner of Riverside County within the City of Riverside (See Regional Location Map, Figure 2-3 and Project Vicinity Map, Figure 2-5). Located in eastern Riverside, the majority of the Project area is bordered on the west by State Highway 91 and on the east by Interstate 215. The proposed alignment for the proposed double-circuit 69 kV subtransmission line generally runs east-west between the two highways along 10th, 11th and 12th Streets, and adjacent to the west side of Interstate 215, between University Substation and El Cerrito Drive. As defined in the city's general plan, the project crosses into four neighborhoods. On the west, the project begins at the Riverside Substation on the eastern edge of the Downtown neighborhood, and proceeds east through the Eastside and University neighborhoods, and terminates to the east in the northern side of the Canyon Crest neighborhood.

The area is characterized by urban and suburban development intermixed with agriculture and undeveloped lands. The natural topography is primarily valley lowlands.

2.5 PURPOSE AND NEED

RPU has determined that there are growing reliability concerns associated with load growth on the existing RPU 69 kV subtransmission system. Table 2-1 is a summary of the RPU planning criteria that defines the electrical system requirements. Local RPU substations are connected to the SCE Vista Substation via seven 69 kV subtransmission lines and are networked together by an additional eighteen 69 kV and 33 kV lines. A summary of line-loading and voltage violations of the RPU planning criteria are listed in Table 2-2. Refer to Appendix A, "69 kV Subtransmission Network Report – Review of Existing System, August 2007" for the complete report of contingency loadings. These violations could cause a potential cascading event where multiple lines are lost uncontrollably and large areas of the City would be without power if manual load shedding is not accomplished quickly enough.

The ability for electric utility companies to operate following the loss of any one major equipment unit, (single contingency loss) such as a subtransmission line is called "N-1" capability. In this instance, if a subtransmission circuit is faulted or taken out of service, the electrical power flow automatically redirects to other system subtransmission lines, causing an increase in loading to the lines still in operation. The

ability for the electrical system to adequately accommodate such a situation without further exacerbating the loss of lines due to an electrical “overload” of the remaining subtransmission lines is a requirement for utilities based on good utility practice.

The August 2007 report (see Appendix A) found that the worst single contingency loading occurs with the loss of the Vista to La Colina line. (See Figure 2-4) The Hunter to University line loading would increase to 134% of its “normal” rating. The magnitude of this overload would potentially cause the conductors to sag enough to result in an electrical fault and subsequent loss of the Hunter to University line. This second contingency (the loss of the Hunter University line) could cascade to the point where large areas of the City would be without power. New 69 kV subtransmission lines are necessary to alleviate the overloading during this potential N-1 scenario.

TABLE 2-1 SUMMARY OF PLANNING CRITERIA

Summary of Riverside Public Utilities Electric Planning Criteria		
Likely Outage Condition (N-1): Defined as loss of one transmission line	No loading in excess of 110% of operating capacity	
	No voltage drop greater than:	3.5% at non-LTC load 5.5% at LTC load *
Unlikely Outage Condition (N-2): Defined as loss of two transmission lines Common-Mode Outage: lines that share a common pole Studied at 80% of peak load (based on historical experience)	No loading in excess of 125% of operating capacity	Exception: for Common-Mode Outage, 110% of operating capacity
	No voltage drop greater than:	5.8% at non-LTC load 7.8% at LTC load *
Assumptions used to arrive at operating capacities of lines: 2 fps wind speed 99 degree C	653 ACSR = 850 amps (935/1060) 954 ACSR = 1000 amps (1100/1250)	(110%/125%) (110%/125%)
If unlikely outage occurs at greater than 80% of peak load, the requirement to shed load is an acceptable outcome		

* LTC load is served from a transformer that is able to automatically raise voltage to at least partially correct a low-voltage condition.

TABLE 2-2 EXISTING AND STP LINE OVERLOAD SUMMARY

RIVERSIDE PUBLIC UTILITIES - EXISTING NETWORK					
ELECTRICAL NETWORK STUDY RESULTS FOR N-1 AND N-2					
	HIGHEST OVERLOAD	# OF CRITERIA VIOLATIONS	# > 125% (1)	GREATEST VOLTAGE DROP	# OF CRITERIA VIOLATIONS
Case assumptions: N-1, 100% loads (601 MW at substation 69/33 kV buses), maximum generation (RERC: 2 @ 48MW, Springs: 4 @ 9 MW)					
	134%	5	2	--	--
Case assumptions: N-2, 80% loads (481 MW at substation 69/33 kV buses), zero generation (2)					
	197%	67	61	16% (3)	2
NOTES:					
1. Loadings greater than 125% require load shedding to protect the overloaded subtransmission line conductors.					
2. Maximum generation could be expected at peak summer loads, as modeled in the base case and N-1 cases. Since the N-2 cases were performed at 80% of peak load, per the RPU Criteria, zero generation would be expected, based on operating history and the economics of energy supply by currently installed internal generation.					
3. Criteria limit is 5.8%.					
RIVERSIDE PUBLIC UTILITIES - PROPOSED STP NETWORK					
ELECTRICAL NETWORK STUDY RESULTS FOR N-1 AND N-2					
	HIGHEST OVERLOAD	# OF CRITERIA VIOLATIONS	# > 125% (1)	GREATEST VOLTAGE DROP	# OF CRITERIA VIOLATIONS
Case assumptions: N-1, 100% loads (601 MW at substation 69/33 kV buses), maximum generation (RERC: 2 @ 48MW, Springs: 4 @ 9 MW)					
	--	--	--	--	--
Case assumptions: N-2, 80% loads (481 MW at substation 69/33 kV buses), zero generation (2)					
	139%	18	16	8.6% (3)	1
NOTES:					
1. Loadings greater than 125% require load shedding to protect the overloaded subtransmission line conductors.					
2. Maximum generation could be expected at peak summer loads, as modeled in the base case and N-1 cases. Since the N-2 cases were performed at 80% of peak load, per the RPU Criteria, zero generation would be expected, based on operating history and the economics of energy supply by currently installed internal generation.					
3. Criteria limit is 7.8%.					

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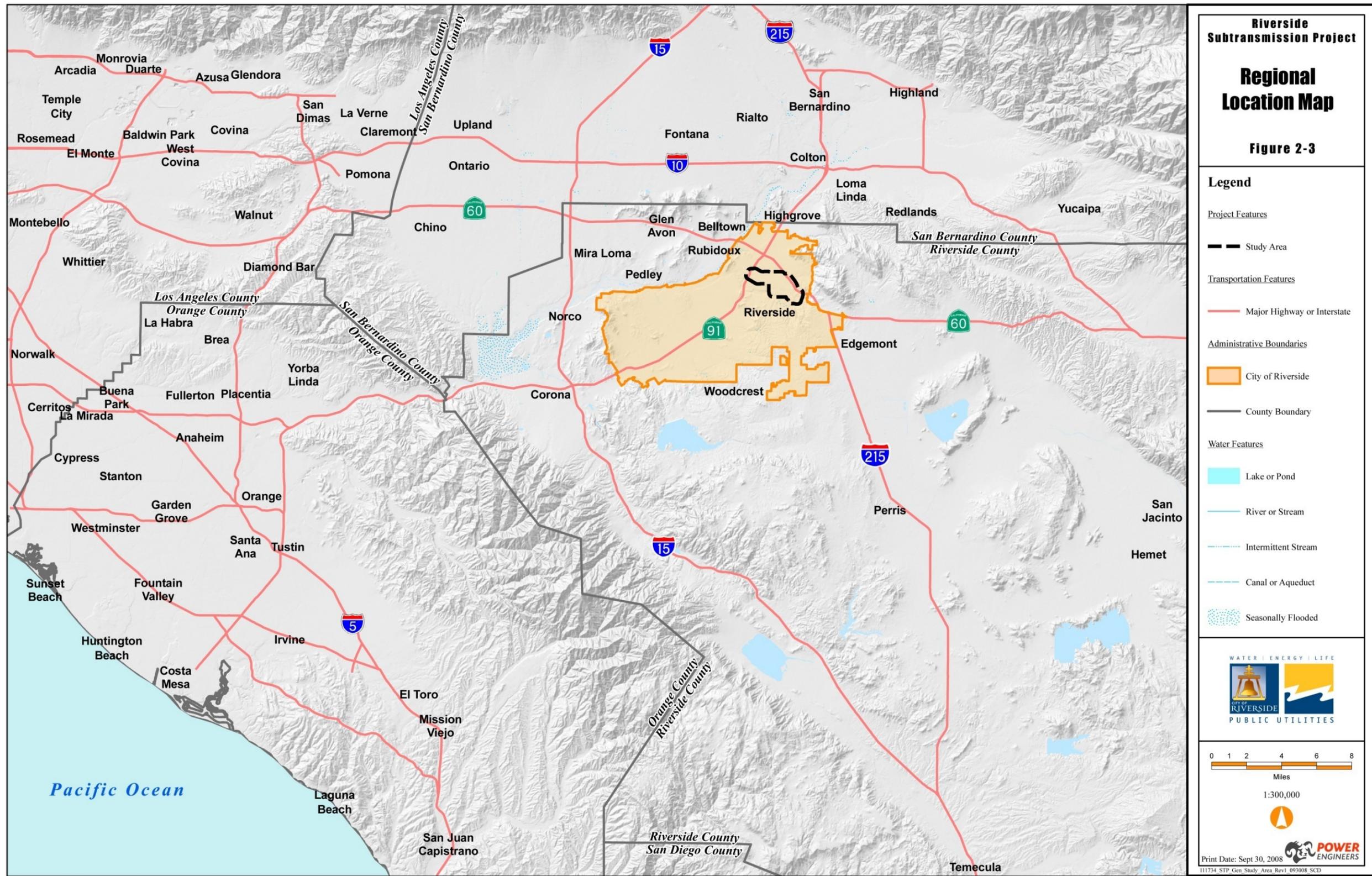


FIGURE 2-3 REGIONAL LOCATION MAP

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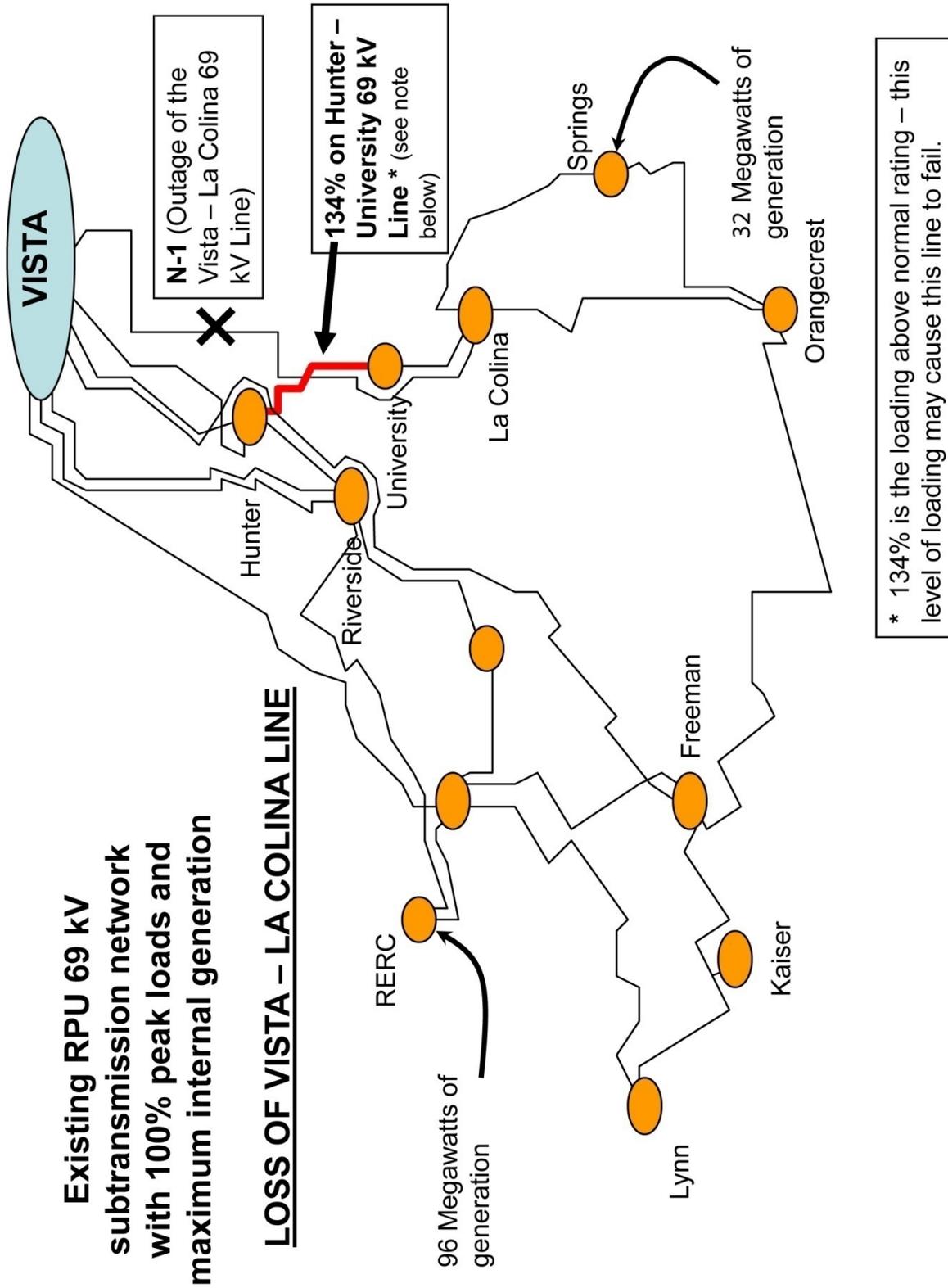


FIGURE 2-4 EXISTING SYSTEM, WORST N-1 CONTINGENCY

2.6 PROJECT DESCRIPTION

To address the contingency loading and voltage violations of the planning criteria, RPU is proposing the Subtransmission Project (STP). The STP as proposed will consist of two new double-circuit 69kV sections of subtransmission lines and upgrades to existing associated substations. The upgrades will add three circuit breakers at Riverside Substation and strengthen relaying at other substations. The net result will be the addition of one 69 kV subtransmission line and re-arrangement of others to enhance the subtransmission connection between the Riverside, La Colina, Springs and University Substations. (See Figure 2-2) The net addition of a new subtransmission line, re-arrangement of others and substation upgrades will re-enforce the eastern side of RPU's network.

The first double-circuit 69 kV subtransmission line would be a new line from Riverside Substation to an existing double-circuit 69 kV subtransmission line immediately west of University Substation. This route will leave Riverside Substation heading southeast crossing the railroad tracks near 9th Street. After crossing the railroad tracks, the line will travel approximately 400 feet southwest adjacent to Commerce Street until 10th Street and then continue southeast on 10th Street until reaching Victoria Avenue. At Victoria the line will travel southwest again for approximately 400 feet to 11th Street. The route will then travel southeast along 11th Street until reaching Sedgewick Avenue where it will turn southwest for approximately 100 feet until reaching 12th Street. The route will then travel east on 12 Street until reaching Chicago Avenue. The line will then cross Chicago Avenue onto the University of California, Riverside campus. The line will continue due east crossing Iowa Avenue until reaching the existing Vista-La Colina and Hunter-University lines approximately 600 west of the University Substation.

On the University of California at Riverside (UCR) property, the existing Vista – La Colina line and Hunter – University line would be intercepted and reconfigured. The second double-circuit 69 kV line would intercept existing lines approximately 800 feet north of University Substation and would generally parallel Interstate 215 south for approximately one mile to its termination point adjacent to Interstate 215, near El Cerrito Drive, where an existing 69 kV subtransmission line (La Colina-Springs) connects to La Colina and Springs Substations. This new line would reconfigure the existing La Colina-Springs 69 kV line resulting in one circuit to La Colina Substation and another circuit to Springs Substation. (See Figure 2-7)

At Hunter Substation, there would be some reconfiguration work to accommodate the new Vista - Freeman and Vista - Hunter changes. There would be no new poles added for the STP project in this area. The circuit work between existing poles would primarily consist of removing one segment of crossovers with parallel circuits, and adding a crossover segment to a length that is currently in a parallel configuration. (See Figure 2-6)

To accommodate the new subtransmission lines to be added to the RPU 69 kV system, the following upgrades would be required at existing RPU 69 kV substations and SCE's Vista Substation:

- **Freeman Substation:** The existing Vista line position would become the Riverside line position with subtransmission modifications at Riverside Substation. New protective relaying would be installed for the line to Riverside Substation.
- **Hunter Substation:** The existing Vista position becomes the Vista – Alumax line position. The existing University line position becomes the Springs line position. The existing Vista - Alumax line position becomes the Vista line position.
- **La Colina Substation:** The subtransmission lines entering the substation would be rearranged so that the existing Vista line position becomes the Riverside line position, the existing University

line position becomes the Vista line position, and the existing Springs line position becomes the University line position. A new control enclosure would be added to house the new line protective relaying for the Vista line and would be sized to accommodate all substation protection and future line additions. A new Substation Automation System (SAS) and digital fault recorder (DFR) would be integrated into existing equipment.

- **Orangecrest Substation:** A new SAS would be integrated into existing equipment.
- **Riverside Substation:** The modifications to the substation would include the addition of three circuit breakers to the 69 kV bus work. This allows the termination of the new La Colina line and re-arrangement of other existing elements as follows: Transformer 5 (T5) would be terminated in a new position. The Plaza line position would become the Freeman line position, the Hunter line position would become the Plaza line position, and the T5 position becomes the Hunter position.
- **Springs Substation:** The existing La Colina line position would become the Hunter line position.
- **University Substation:** The existing Hunter line position becomes the La Colina line position. The existing La Colina line position becomes the Vista line position.
- **Vista Substation:** The existing La Colina line position becomes the University line position. The existing Hunter line position becomes the La Colina line position. The existing Freeman line position becomes the Hunter line position.

The STP project would also include rearrangement and upgraded electrical distribution facilities, 120-volts to 12,000-volts (12 kV). As a part of the rearrangement and upgrade, 4 and 12 kV overhead circuits would be converted to underground on 10th Street, west of Commerce to Park Avenue. Between Park and Victoria Avenue a 4 kV circuit will be removed and an existing 4 kV line route will be upgraded. The upgrade route would begin with a new riser pole on Park Street north of 10th Street and travel north on Park to one lot south of University Avenue. It would then travel east to Victoria Avenue and then south to rejoin the 69 kV line route at 10th and Victoria. (Figure 2-10)

The project's laydown or construction yard is owned by the City of Riverside and is located at 1420 Linden Street. (Figure 2-7) It is on the south side of Linden between Cranford Avenue and Iowa Avenue. The yard would be used to store construction vehicles, equipment, and materials; and would be used as a staging area throughout the construction process. It is a gate-secured and fenced lot that is approximately 100' x 600'. It is primarily a dirt lot that would be covered with gravel during project use to reduce dust, runoff and erosion.

RPU is planning to complete construction of the needed upgrades of the STP by spring of 2010. This date is contingent upon obtaining reasonable delivery times for procured materials.

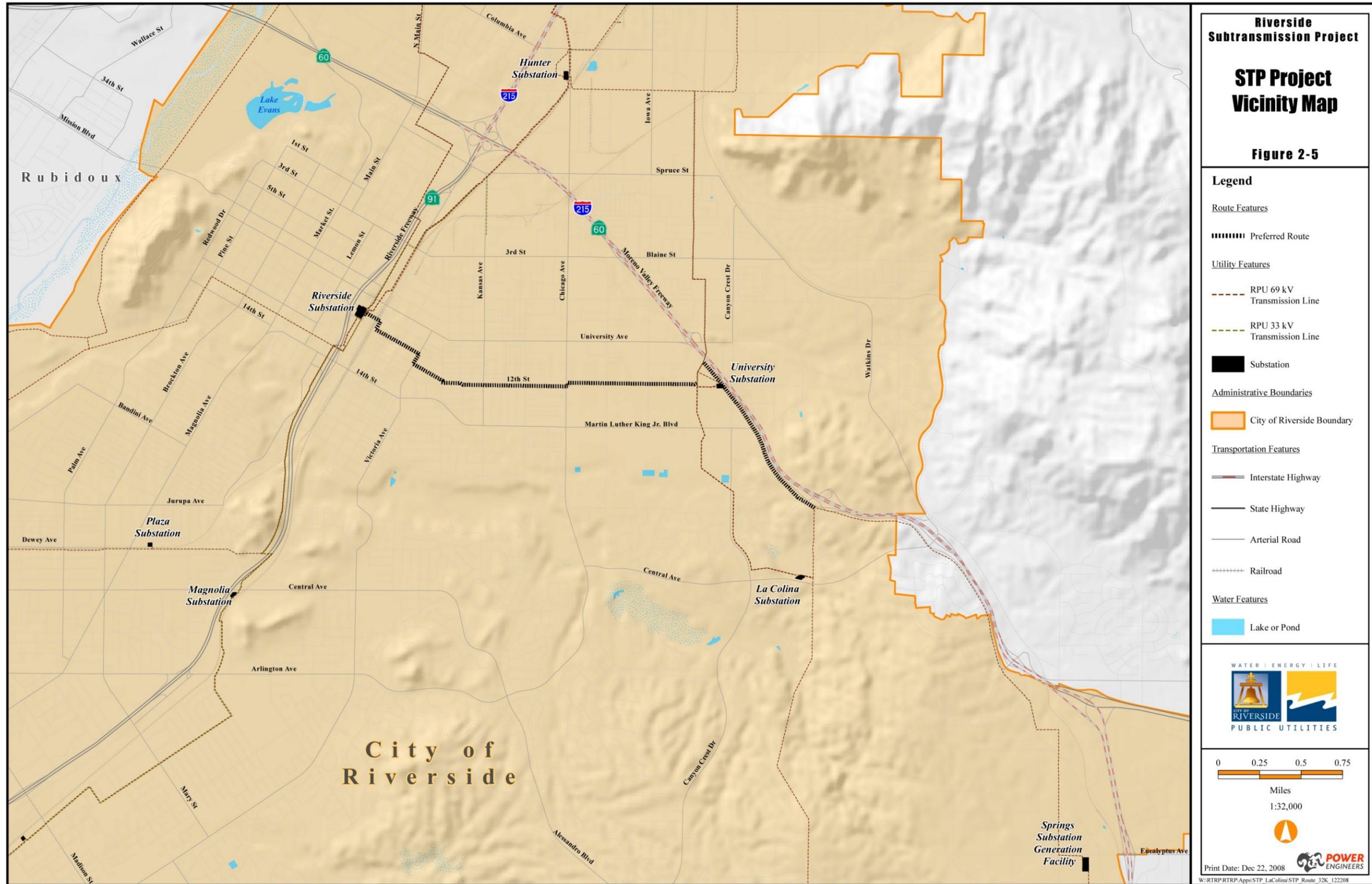


FIGURE 2-5 PROJECT VICINITY MAP

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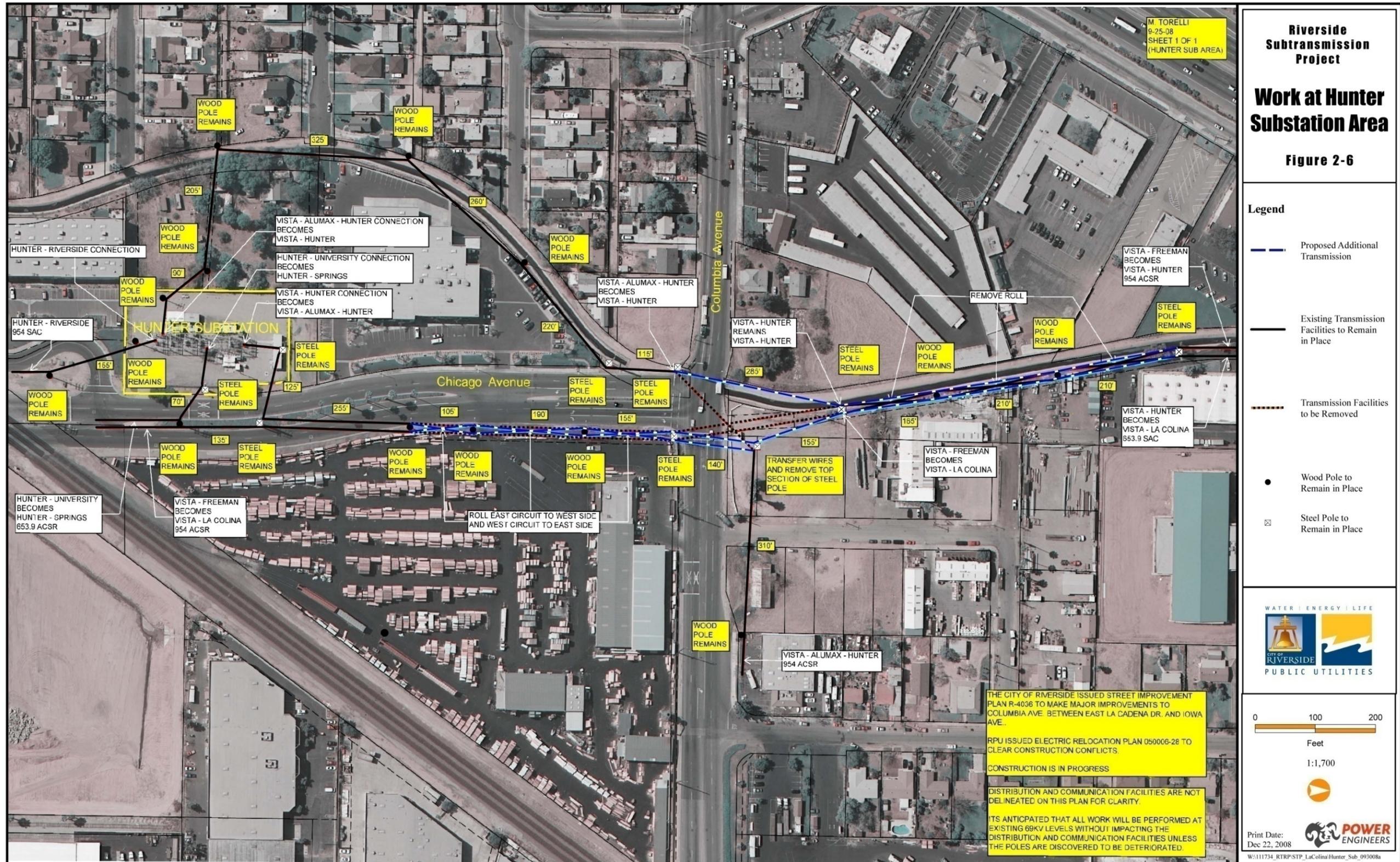


FIGURE 2-6 WORK AT HUNTER SUBSTATION AREA

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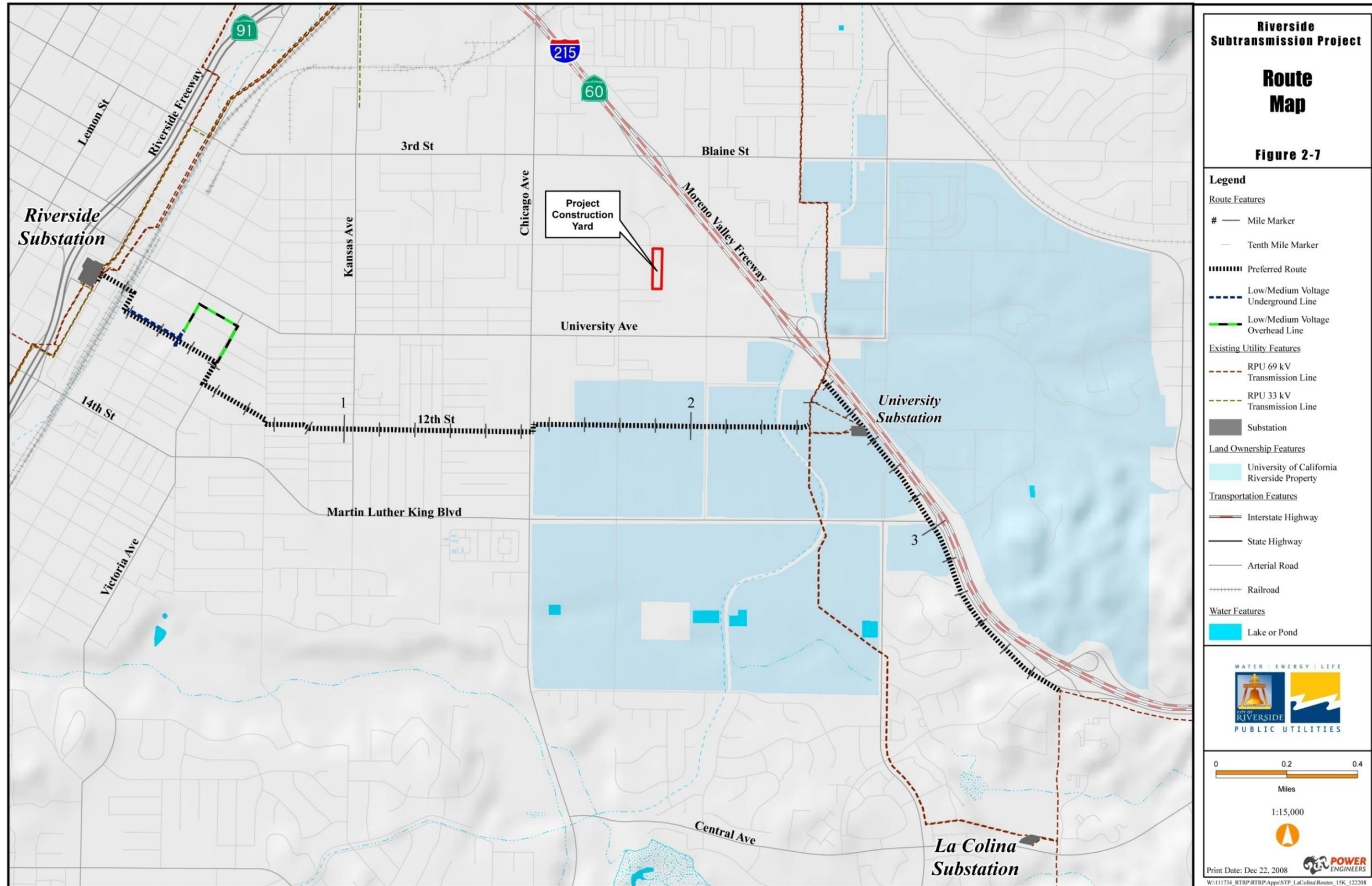
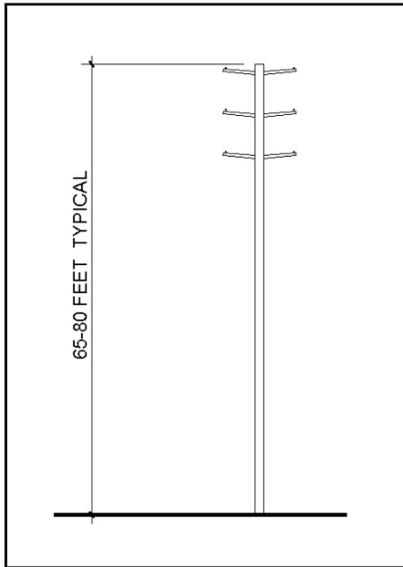


FIGURE 2-7 ROUTE MAP

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**FIGURE 2-8 TYPICAL 69 kV
POLE STRUCTURE**

Construction Methods and Proposed 69 kV Structure Types

The proposed 69 kV subtransmission lines would be constructed using structures consisting of single tubular steel poles or wood poles. Typical heights range from 65 to 80 feet. (See Figure 2-8) and the typical span length is approximately 150-300 feet. The poles would be primarily wood but steel poles would be used where long spans are required and where directional changes in the line are necessary. The subtransmission line would be composed of tangent poles, angle structures and dead-end structures. On tangent structures, conductors approach and depart the structures in a straight line. Dead-end structures would be used for limited changes in line direction. Structure weights would vary with heights and specific load requirements.

On the dead-end structures and angle structures, the conductor angle is directly into the structure crossarm and the insulator hardware assembly becomes part of the span. The line continues on the other side of the structure in the same fashion. A conductor jumper is strung between one side of the structure and the other to electrically connect the two spans across the tower.

All 69 kV pole foundations would be directly embedded with the exception of heavy angle and dead end poles that would be set on drilled pier concrete foundations. The foundations would be built below grade to enable the finished surface at the base of the pole to remain flush with the existing surface. The bottom of the poles would vary in diameter from approximately 1.5 to 3.0 feet for tangent and angle poles and between approximately 3.0 and 5.0 feet in diameter for dead end poles. Installation depths would vary according to local soil and geological conditions and structural requirements.

The 69 kV subtransmission line insulator assemblies would consist of horizontal post insulator assemblies for tangent and light angle structures and suspension dead end insulator assemblies for dead end and heavy angle structures.

The construction of the proposed 69 kV subtransmission lines would generally follow the sequence of surveying the centerline, access road preparation, clearing ROW, installing foundations and poles, assembling and erecting towers, stringing, tensioning, clipping conductors, and cleanup and restoration.

A temporary marshalling yard would be needed along or near the proposed subtransmission lines for construction crews to store materials and vehicles. Access to structure sites for construction and maintenance would be required at several locations along the corridors.

Most access would be located on existing roads or previously disturbed areas. Any temporary roads constructed would be removed and the ground would be restored to its original contour when the line construction is completed. Land rights, usually easements, for access roads would be acquired from property owners as necessary. After the line is built, access roads would also be used for line maintenance.

Up to a 40-foot-wide easement may be required for the 69 kV subtransmission line ROW. The easement width is dictated by requirements for maintenance and safety and the swing of the conductors caused by

wind. To the maximum extent feasible, the new 69 kV subtransmission lines would be constructed in existing ROW, such that no additional private ROW would be required.

The ROW would not be clear-cut. However, limited cutting of trees and tall brush in the ROW may occur if they interfere with the construction, operation, and maintenance of the subtransmission line. Trees would be cut outside the ROW only if, due to their height and condition, they may pose a threat to the subtransmission line.

Construction work to upgrade the existing substations would occur within their existing boundaries so that no grading or site development work would be needed outside the substation footprint. Concrete foundations would be installed in the substations requiring additional outdoor equipment such as circuit breakers, instrument transformers, control room and steel structures. Following foundation installation, below ground conductor and conduit would be installed. Steel structures would then be erected and electrical equipment and buswork would be installed. Additional substation control and protection equipment and wiring would be installed within the existing and/or new control buildings.

General construction equipment and workforce estimates were defined for the project. The project would consist of installation of approximately 110 new poles and the removal of approximately 85 existing poles. Of the approximately 110 new poles, about 75 would be wood poles and 35 steel. It is estimated that construction crews could construct and place approximately 1 pole a day and remove 1 pole in a half-day. This would result in 143 days (20 days/month) or 7.2 months for project construction. These reasonable estimates may vary due to size of crews and actual project phasing or sequencing. A typical equipment list would be similar to Table 2-4 but would be modified and refined by the construction contractors.

The STP project would also include the undergrounding of a section of primary and secondary (120 volt to 12 kV) electrical distribution lines. In order to upgrade the existing distribution network, approximately 1,700 linear feet of existing overhead distribution facilities would be converted to underground. (See Figure 2-10) The undergrounding construction would primarily occur in existing

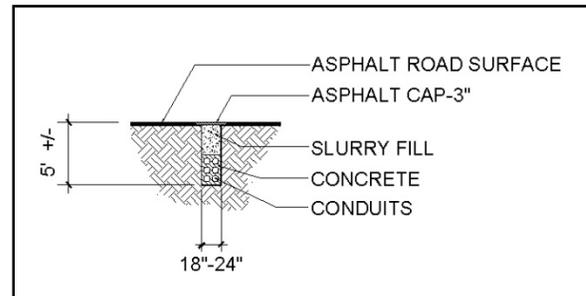


FIGURE 2-9 UNDERGROUNDING DIAGRAM

asphalted road ways on 10th Street between Commerce Avenue and Park Avenue and connecting short distances both north and south on Park to existing overhead poles. The trenching would be approximately 18" wide to encase the conduits containing electrical lines at a depth of approximately 5'. The streets would be covered by metal plates, managed by directional flag men, and follow best management practices during construction to ensure public safety. (See Figure 2-9 and Table 2-3)

Best Management Practices

Best management and design practices throughout conception, construction, and implementation of the project ensure that public safety is paramount and potential environmental impacts are reduced. The following is a list of best management practices for Air Quality, Biological Resources, and Geology and Soils.

- Air Quality: Vehicle speeds limited to 15 mph on unpaved surfaces.
- Air Quality: On the last day of active operations prior to weekend or holiday, apply water or chemical stabilizer to maintain a stabilized surface.

- Air Quality: Water excavated soil piles or cover with temporary coverings.
- Air Quality: Moistened excavated soil prior to loading haul trucks.
- Air Quality: Cover all loads of dirt leaving the site or leave sufficient freeboard capacity to prevent fugitive dust emissions while en route to disposal site.
- Air Quality: Application of water to ground surfaces prior and during earthmoving activity.
- Biological Resources: All construction equipment transported to the project from outside of the adjacent counties or areas of potential invasive species will undergo a one-time cleaning at the project's construction yard. This cleaning will remove mud, weeds and debris from trucks and equipment prior to transporting to the site.
- Biological Resources: Project personnel shall exercise care to prevent ground disturbance activities to within the approved ROW.
- Biological Resources: In order to minimize disturbance to diurnal and nocturnal native wildlife, night time construction shall utilize shielded lighting and direct lighting toward specific work areas requiring illumination.
- Geology and Soils: Appropriate structure design would be used to mitigate the potential from impacts from very strong seismic ground shaking.
- Geology and Soils: Appropriate design of structure foundations will be used to reduce the potential from settlement and/or compaction.

**TABLE 2-3 ESTIMATED UNDERGROUNDING CONSTRUCTION DURATION,
 EQUIPMENT AND PERSONNEL**

Type of Crew	Duration	Vehicles	Personnel
Structure Crew	2 weeks	Pickup, dump truck, trailer, backhoe, flat bed	Foreman, backhoe operator, 3 laborers
Trench Plating	2 days	Flatbed with boom	One operator
Asphalt Repair	1 day	Pickup, dump truck, trailer, asphalt truck, asphalt paver, compaction equipment	Foreman, 2 equipment operators, 3 laborers
Underground Crew	15 days	Pickup, line truck, cable pulling equipment, boom truck, payoff reels with cable, flatbed	Foreman, 4 linemen, 1 laborer

TABLE 2-4 OVERHEAD SUBTRANSMISSION CONSTRUCTION ESTIMATES.

Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Total Full Time Equivalents for this Activity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)
Survey					(1 Crew)	
Truck, Pick-Up	180	Gas	1	1		2.50
Marshalling Yard					(1 Crew)	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	3		5.00
Forklift, 5 Ton	75	Diesel	1			5.00
Truck, Flatbed, 1 Ton	180	Gas	1			3.00
Trailer, Office, 40' - 60'	N/A	N/A	N/A			N/A
Flagmen					(1 Crew)	
Truck, Flatbed, 1 Ton	180	Gas	1	1		2.50
Truck, Pick-Up	180	Gas	1	1		2.50
Dust Control					(1 Crew)	
Truck, Water, 2,000 - 5,000 Gal	175	Diesel	1	1		5.00
Dig Wood Pole Holes					(1 Crew)	
Digger, Transmission Type, Truck Mount	190	Diesel	1	2		6.00
Truck, Flatbed, 1 Ton	210	Diesel	1			3.00
Dig and Install Anchor Bolt Foundations					(1 Crew)	
Digger, Transmission Type, Truck Mount	190	Diesel	1	7		6.00

Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Total Full Time Equivalents for this Activity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)
Truck, Flatbed, 2 Ton	210	Diesel	1			2.00
Truck, Concrete, 10 Yd	310	Diesel	2			4.00
Truck, Flatbed w/Boom, 5 Ton	235	Diesel	1			2.00
Loader, w/ Bucket	85	Diesel	1			2.00
Truck, Dump, 10 Ton	235	Diesel	1			2.00
Truck, Pick-Up	210	Diesel	1			2.00
Truck, Flatbed, 1 Ton	210	Diesel	2			2.00
Motor, Auxiliary Power	5	Gas	1			2.00
Trailer, Storage, 40'	N/A	N/A	N/A			N/A
Haul Wood and Steel Poles					(1 Crew)	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	3		2.00
Truck, Semi, Tractor	310	Diesel	1			2.00
Trailer, Flatbed, 40'	N/A	N/A	1			N/A
Trailer, Stretch, Pole Haul	N/A	N/A	1			N/A
Truck, Flatbed, 1 Ton	210	Diesel	1			2.00
Frame / Assemble - Set / Erect Wood and Steel Poles					(1 Crew)	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1	4		2.00
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1			2.00
Truck, Pick-Up	180	Gas	1			2.00

Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Total Full Time Equivalents for this Activity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)
Truck, Flatbed, 1 Ton	180	Gas	1			2.00
Cleanup at Pole Holes and Anchor Bolt Foundation Holes					(1 Crew)	
Loader, w/ Bucket, 980	85	Diesel	1	2		3.00
Truck, Dump, 10 Ton	235	Diesel	1			3.00
Truck, Flatbed, 1 Ton	210	Diesel	1			3.00
Install New Sub Transmission and Distribution Conductors (Sheaves, Stringing, Sagging, Dead-ending, Clipping, Jumpers)					(1 Crew)	
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	2	10		5.00
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1			5.00
Tension Machine	135	Diesel	1			2.00
Truck, Wire Puller, 3 Drum	310	Diesel	1			2.00
Truck, Wire Puller, 1 Drum	310	Diesel	1			2.00
Truck, Semi, Tractor	310	Diesel	1			4.00
Trailer, Lowboy with Reel Stands	N/A	N/A	3			N/A
Trailer, Lowboy	N/A	N/A	1			N/A
Crawler, Track Type, Sagging (D8 type)	305	Diesel	1			2.00
Truck, Flatbed, 1 Ton	180	Gas	3			5.00
Truck, Pick-Up	180	Gas	2			6.00
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	2			3.50
Motor, Auxiliary Power	5	Gas	3			2.00

Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Total Full Time Equivalents for this Activity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)
<i>Install New Distribution Services (Switches, Taps, Feeds, Transformers, Cutouts, Risers, etc.)</i>					(1 Crew)	
Truck, Flatbed, 1 Ton	180	Gas	3			4.00
Truck, Pick-Up	180	Gas	2			4.00
Crane, Hydraulic	125	Diesel	2			3.00
Motor, Auxiliary Power	5	Gas	2			2.00
<i>Remove Old Wood / Steel Poles</i>					(1 Crew)	
Crane, Hydraulic, Rough Terrain, 35 Ton	125	Diesel	1			6.00
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1			5.00
Truck, Semi, Tractor	310	Diesel	1			2.50
Trailer, Flatbed, 40'	N/A	N/A	1			N/A
Trailer, Stretch, Pole Haul	N/A	N/A	1			N/A
Truck, Pick-Up	180	Gas	1			4.00
Truck, Flatbed, 1 Ton	180	Gas	1			4.00
<i>Install and Remove Guard Pole Structures</i>					(1 Crew)	
Digger, Transmission Type, Truck Mount	190	Diesel	1	4		3.00
Truck, Flatbed w/ Boom, 5 Ton	235	Diesel	1			5.00
Truck, Flatbed, w/ Bucket, 5 Ton	235	Diesel	1			5.00
Back Hoe, w/ Bucket	85	Diesel	1			4.00
Truck, Dump, 10 Ton	235	Diesel	1			4.00

Primary Equipment Description	Horsepower	Fuel Type	Primary Equip Quantity	Estimated Total Full Time Equivalents for this Activity	Estimated Activity Schedule (Work Days unless otherwise noted)	Estimated Equipment Usage Time (Hr Per Day)
Truck, Semi, Tractor	310	Diesel	1			3.00
Trailer, Expandable Pole	N/A	N/A	1			3.00
Truck, Flatbed, 1 Ton	210	Diesel	1			6.00
Truck, Pick-Up	210	Diesel	1			6.00

2.7 ENVIRONMENTAL SETTING AND SURROUNDING LAND USES

The natural topography of the project area is valley lowland intersected with rolling hills surrounded by mountain ranges. Elevations within the project area range from approximately 880 to 1,100 feet above mean sea level (MSL). The entire project area has been developed and few native habitats or undisturbed lands remain.

Land uses in the project area are primarily single-family residential and institutional (University of California, Riverside West Campus). Lesser amounts of multi-family, public park, commercial, industrial, and agriculture are also found.

2.8 AGENCIES, PERMITS, AND APPROVALS

All the required federal, state, and local agency permits and approvals would be obtained prior to the start of construction of the proposed Project. This list may be modified as a result of field investigations and further consultation with agencies.

Local Agencies

City of Riverside

- Traffic permits consistent with Riverside City codes

Riverside County

- Regional Conservation Authority Notice of Inclusion (MSHCP)

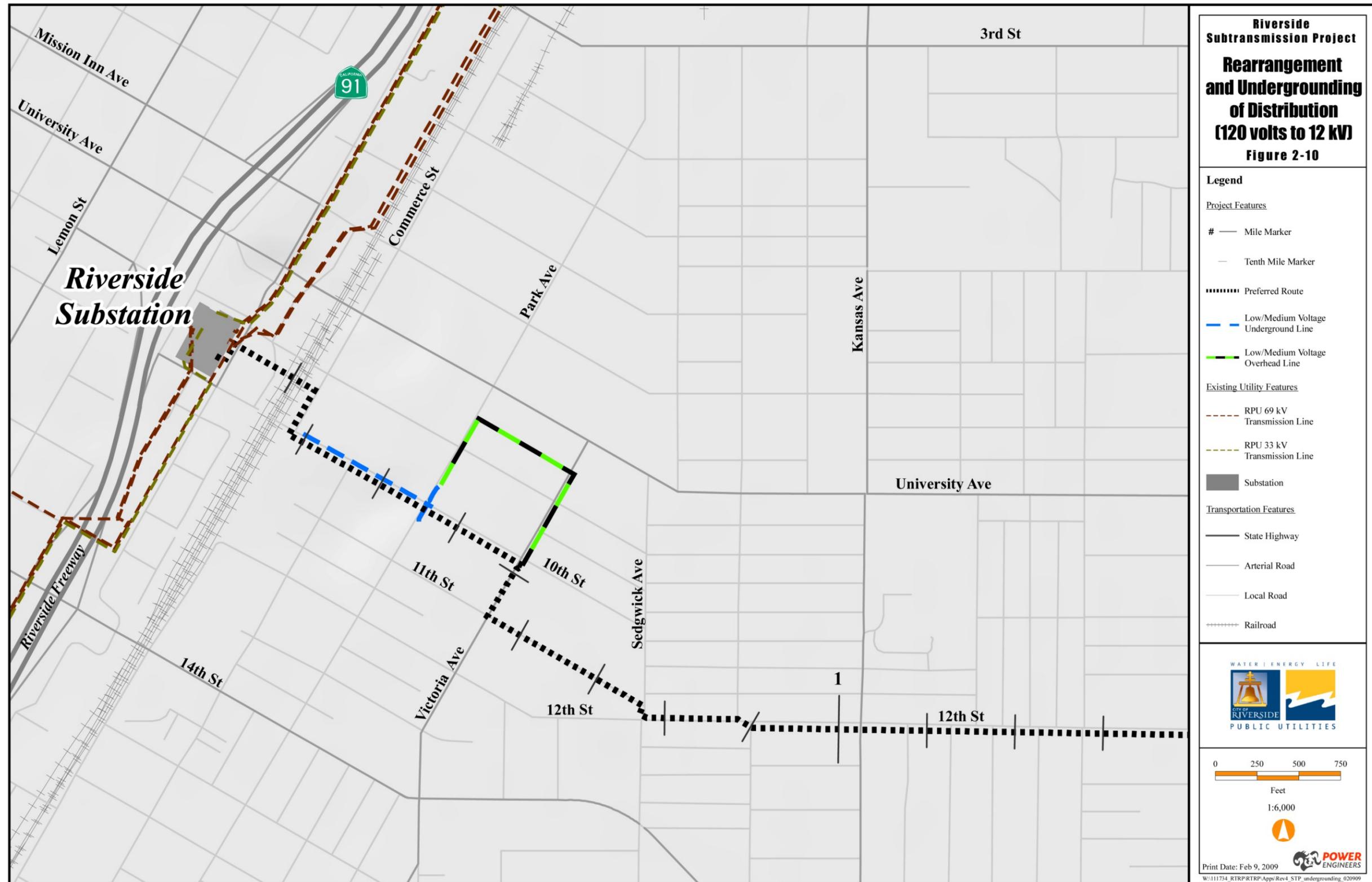


FIGURE 2-10 REARRANGEMENT AND UNDERGROUNDING OF DISTRIBUTION

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3.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

3.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

LESS THAN SIGNIFICANT IMPACT. The lines are located in the City of Riverside where existing electric lines, diverse development and mature landscape vegetation typically block potential scenic vistas. The proposed lines cross Victoria Avenue which is identified in the General Plan 2025 as a city parkway. However, the General Plan 2025 does not specifically prohibit the siting of subtransmission lines and Victoria Avenue in this area is in an established and densely landscaped residential neighborhood where no scenic vistas occur. Therefore, no substantial adverse effects on a scenic vista would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

NO IMPACT. The Project will not substantially damage scenic resources as the project is located within highly developed landscapes where there are existing electrical lines throughout. Additionally, there are no California State Scenic Highways in the project area.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

LESS THAN SIGNIFICANT IMPACT. Most of the project is located within highly developed urban areas where subtransmission, distribution, and other utility lines and pole structures are existing significant visual elements that help to define the current landscape character. However, to reduce degradation or improve the existing visual character and quality of specific areas within the project, the project design sought solutions to reduce the

number and height of structures, increase spacing of structures, and to favor the use of wood poles over steel poles wherever practical.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

LESS THAN SIGNIFICANT IMPACT. There will be no permanent additional light sources as a result of the project, and therefore no substantial impacts related to light and glare in the area. Routine construction, operation, and maintenance work will be performed during the day; however, there may be times during construction when night time lighting will be necessary for security and to maintain a safe working environment. The lighting will be directed toward the work areas requiring illumination and away from motorists and residences.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025.*

University of California, Riverside. November 2005. *UCR 2005 Long Range Development Plan.*

3.2 AGRICULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION. See 3.2c) below for discussion.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

NO IMPACT. The project would not result in conflicts with existing zoning for agricultural use and is not located on land that is under a Williamson Act contract. Therefore, there would be no impact related to existing zoning for agricultural use or a Williamson Act contract.

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?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION. The existing Freeman, Hunter, La Colina, Orangecrest, Riverside, Springs, University and Vista Substations are not located on land categorized as *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance* as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Modifications to the substations, which would occur within the existing boundary and fence lines of the substations, would not result in the conversion of *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance*, or any other changes in the existing environment that could result in conversion of Farmland to non-agricultural use.

Construction of the 69 kV subtransmission lines would include removal of 23 existing subtransmission poles and installation of 23 new subtransmission poles on University of California, Riverside (UCR) West Campus agricultural land. The land, categorized as *Prime Farmland* is located between mileposts 1.5 and 3.1 on existing dirt access roads/open space. Pulling and stringing activities would also occur on designated *Prime Farmland*. In these situations, the temporary disturbance associated with the pulling stations would be limited to a total of .06 acres.

UCR West Campus agricultural land is currently managed as agricultural teaching and research fields and provides other related support functions. Plant species vary but generally include collections of citrus, avocados, jojoba, guayule, asparagus, figs, turf, ornamentals, palms, row crops, and a germplasm collection. The fields are dominated by citrus orchards to the north of Martin Luther King Boulevard and by experimental plots to the south. Most of the northern portions of the fields undergo limited, but systematic, disturbances resulting from weed control, citrus harvesting, and other activities associated with maintenance. The southern portions of the fields contain a variety of seasonal experimental plots used by students and faculty. Some sections of these fields have permanent groves and crops that undergo regular maintenance, other sections have various crops planted from year to year, and some plots are utilized in different ways both within and between years.

Impact: The Project would result in the temporary disturbance (pulling and stringing locations and the use of existing dirt access roads/open space) of farmland that is designated *Prime Farmland*. This would be a less than significant impact with implementation of Mitigation Measures AGR-1 and AGR-2.

Mitigation Measure AGR-1: Provide construction specifications regarding soil salvage and reuse (preserve and replace topsoil disturbed by project-related activities), vegetation protection, and finished grading.

Mitigation Measure AGR-2: Confine construction operations to specified project work limits. Install temporary barriers to protect natural surroundings (including trees, plants, and

root zones) from damage. Repair or replace damaged trees and plants, and avoid fastening ropes, cables, or fences to trees.

Impact: The installation of pole foundations would result in the permanent conversion of land designated as *Prime Farmland*. This would be a less than significant impact.

The project would occupy .002 acres of agricultural land designated *Prime Farmland* for pole placement. However, due to the limited footprint of the structures, their placement would not result in the conversion of a significant amount of *Prime Farmland*. These losses would represent a small proportion of existing 2004 inventories of *Prime Farmland* (134,429 acres) in Riverside County.

Sources

California Department of Conservation (CDC), Division of Land Resource Protection. 2004. *Table A-22, Riverside County, 2002-2004 Land Use Conversion.*

City of Riverside. November 2007. *Riverside General Plan 2025.*

University of California, Riverside. November 2005. *UCR 2005 Long Range Development Plan.*

University of California, Riverside. March 2003. *West Campus Area Plan.*

3.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state AAQS (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentration?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors that would affect a substantial amount of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

LESS THAN SIGNIFICANT IMPACT. The Air Quality Management Plan (AQMP) for the South Coast Air Basin (SCAB) sets forth a comprehensive program that will lead the SCAB into compliance with all federal and state air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections.

The project consists of the construction and operation of subtransmission lines, which are needed to serve the existing electricity needs of the City. The City of Riverside General Plan 2025 sets forth land use plans regarding projected growth and development within the City. The proposed project is necessary to accommodate the growing electricity infrastructure and needs of the City. Therefore, the project is consistent with the City's General Plan and will not affect implementation of the AQMP. Impacts are considered less than significant.

b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?

LESS THAN SIGNIFICANT IMPACT. The project is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD has developed thresholds of significance for both regional and localized air quality impacts, which the project must comply with. The short-term construction emissions from the project were estimated. Maximum short-term daily emissions compared to the applicable SCAQMD regional significance thresholds are as follows:

Proposed Project Construction Emissions Compared to Regional Thresholds

	Peak Daily Construction Emissions (lbs/day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO ₂
Aboveground Pole Installation	50.51	5.64	22.52	21.08	5.28	0.05
Underground Construction	13.17	2.58	9.29	0.88	0.79	0.25
SCAQMD Daily Regional Significance Thresholds	100	75	550	150	55	150
Exceed Threshold (Yes/No)?	No	No	No	No	No	No

Short-term construction emissions from the project are below all the SCAQMD regional significance thresholds.

The project site is located in SRA 23 and the nearest sensitive receptors are residences located adjacent to the underground segment of the project. Therefore, a receptor distance of 25 meters was used for this segment. The aboveground segment of the project is located within commercially designated areas, and there are no sensitive receptors within at least 100 meters. Therefore a receptor distance of 100 meters was used for this segment. Maximum

short-term daily emissions compared to the applicable SCAQMD localized significance thresholds are as follows:

**Proposed Project Construction Emissions Compared to Localized Thresholds
 at 25 Meter Receptor Distance**

	Peak Daily Construction Emissions (lbs/day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO ₂
Underground Construction	13.17	2.58	9.29	0.88	0.79	0.25
SCAQMD Daily Localized Significance Thresholds (25 meters)	235	N/A	523	4	3	N/A
Exceed Threshold (Yes/No)?	No	--	No	No	No	--

**Proposed Project Construction Emissions Compared to Localized Thresholds
 at 100 Meter Receptor Distance**

	Peak Daily Construction Emissions (lbs/day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO ₂
Aboveground Pole Installation	50.51	5.64	22.52	21.08	5.28	0.05
SCAQMD Daily Localized Significance Threshold (100 meters)	424	N/A	1,517	30	8	N/A
Exceed Threshold (Yes/No)?	No	--	No	No	No	--

Short-term construction emissions from the project are below all applicable SCAQMD regional and localized significance thresholds. Thus, short-term emissions from project construction are considered less than significant on both a regional and localized level. The emission rates proved herein are not significant relative to SCAQMD criteria. The magnitude of the particulate matter emissions expressed herein were calculated based on the diligent use of the best management practices listed in Section 2.6.

The United States is the largest contributor of GHGs (green house gases) in the world and California is the second largest GHG contributor in the United States, second only to Texas. California's GHG emissions would place California as the 16th largest world-wide contributor when compared to other countries. In 2004, California produced 492 million metric tons of CO₂-equivalent (CO₂e) greenhouse gas emissions, including emissions associated with imported electricity. Project construction will result in annual emissions of 359.54 metric tons CO₂e and project operation will result in annual emissions of 0.13 metric tons CO₂e. The project's GHG emissions are 0.000073% of California's GHG emissions. The project's GHG emissions from construction and operation are below the draft threshold of 7,000 metric tons per year in the California Air Resources Board's guidance document, "Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act." Therefore, the project's GHG emissions are considered less than significant.

- c) **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state AAQS**

(including releasing emissions which exceed quantitative thresholds for ozone precursors)?

LESS THAN SIGNIFICANT IMPACT. The portion of the South Coast Air Basin within which the project is located is designated as a non-attainment area for ozone and PM₁₀ under state standards, and as a non-attainment area for ozone, PM₁₀, and PM_{2.5} under federal standards.

In evaluating the cumulative effects of the project, Section 21100(e) of CEQA states that “previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis.” In addressing cumulative effects for air quality, the AQMP utilizes approved general plans and, therefore, the general plan is the most appropriate document to use to evaluate cumulative impacts of the project. This is because the AQMP evaluated air quality emissions for the entire south coast air basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the project, into compliance with all federal and state air quality standards. Since the project is in compliance with the AQMP and both short-term and long-term emissions are below all applicable SCAQMD established regional and localized thresholds of significance, the project’s cumulative impact to air quality is considered less than significant.

d) Expose sensitive receptors to substantial pollutant concentration?

LESS THAN SIGNIFICANT IMPACT. Most of the construction of proposed project is within residential/commercial areas in Riverside. The project site is located in SRA 23 and the nearest sensitive receptors are residences located adjacent to the underground segment of the project along 10th and 12th Streets in the City of Riverside, which have been estimated to be less than 25 meters away, based on measurements using aerial photographs. Therefore, a receptor distance of 25 meters was used for this segment. The aboveground segment of the project is located within commercially designated areas, and there are no sensitive receptors within at least 100 meters. Therefore a receptor distance of 100 meters was used for this segment. Maximum short-term daily emissions compared to the applicable SCAQMD localized significance thresholds are as follows:

**Proposed Project Construction Emissions Compared to Localized Thresholds
 at 25 Meter Receptor Distance**

	Peak Daily Construction Emissions (lbs/day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO ₂
Underground Construction	13.17	2.58	9.29	0.88	0.79	0.25
SCAQMD Daily Localized Significance Thresholds (25 meters)	235	N/A	523	4	3	N/A
Exceed Threshold (Yes/No)?	No	--	No	No	No	--

**Proposed Project Construction Emissions Compared to Localized Thresholds
 at 100 Meter Receptor Distance**

	Peak Daily Construction Emissions (lbs/day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO ₂
Aboveground Pole Installation	50.51	5.64	22.52	21.08	5.28	0.05
SCAQMD Daily Localized Significance Threshold (100 meters)	424	N/A	1,517	30	8	N/A
Exceed Threshold (Yes/No)?	No	--	No	No	No	--

Short-term construction emissions from the project are below all applicable SCAQMD localized significance thresholds.

Maximum short-term daily emissions compared to the applicable SCAQMD regional significance thresholds are as follows:

Proposed Project Construction Emissions Compared to Regional Thresholds

	Peak Daily Construction Emissions (lbs/day)					
	NO _x	VOC	CO	PM ₁₀	PM _{2.5}	SO ₂
Aboveground Pole Installation	50.51	5.64	22.52	21.08	5.28	0.05
Underground Construction	13.17	2.58	9.29	0.88	0.79	0.25
SCAQMD Daily Regional Significance Thresholds	100	75	550	150	55	150
Exceed Threshold (Yes/No)?	No	No	No	No	No	No

Short-term construction emissions from the project are below all the SCAQMD regional significance thresholds.

Short-term construction emissions from the project are below all applicable SCAQMD regional and localized significance thresholds and there are no operational emissions associated with the project. Thus, short-term emissions from project construction and long-term emissions from project operation will not expose any sensitive receptors to substantial pollutant concentration, and emissions are considered less than significant on both a regional

and localized level. The emission rates proved herein are not significant relative to SCAQMD criteria. The magnitude of the particulate matter emissions expressed herein were calculated based on the diligent use of the best management practices listed in Section 2.6.

e) **Create objectionable odors that would affect a substantial amount of people?**

LESS THAN SIGNIFICANT IMPACT. The use of diesel construction equipment during various construction phases may generate odors that are considered to be a nuisance. Diesel equipment emits a distinctive odor that may be considered offensive to certain individuals. It is estimated that each transmission line pole location will take one day to install before moving to the next location. Recognizing the short-term duration and quantity of emissions from the project will not expose substantial numbers of people to objectionable odors. Therefore, impacts from short-term construction odors are considered less than significant.

Sources

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Power 2007 – Riverside Transmission Reliability Project Construction Equipment and Workforce Estimates Table dated August 30, 2007.

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US EPA 2006b - Document AP-42, Volume I, Fifth Edition, Chapter 13.2.2, Unpaved Roads. November.

3.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the Project:

- a) **Have a substantial adverse effect, either directly or indirectly 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 WITH MITIGATION INCORPORATION. Based on a review of California Native Plant Society, California Natural Diversity Database, and field

surveys (June, 2007), it was determined that six special status plants have potential to occur within the project area. The potential for any sensitive species is determined to be low because of past urbanization and conversion of native land to agricultural use. Milepost 3.5 (see Figure 2-7) contains remnant native habitat where three special status sensitive plant species may occur. Parish's desert-thorn (*Lycium parishii*) and Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*). Habitat surveys conducted identified marginally suitable habitat within milepost 3.5, but no special status plant species was observed. Surveys were conducted during a drier than average year. Prior to and within 30 days of ground-disturbing activities, focused preconstruction surveys for special status sensitive plant species, including round-leaved filaree and smooth tarplant (MSHCP Criteria Area Species) will be conducted. If special status plants are discovered, alternative construction methods and material placement will be considered to reduce impacts to sensitive plant populations, access roads may be altered as feasible to avoid special status plant populations, or special status plants may be salvaged and relocated in adjacent suitable locations of the right-of-way (ROW) that would not be affected by construction or maintenance activities.

Preconstruction surveys will be conducted by a qualified botanist during the appropriate blooming periods in all suitable habitats within 100 feet of ground-disturbing activities. If a special status plant is discovered, alternative construction methods and material placement will be considered to reduce impacts to sensitive plant populations, access roads may be altered as feasible to avoid special status plant populations, or special status plants may be salvaged and relocated in adjacent suitable locations of the right-of-way (ROW) that would not be affected by construction or maintenance activities. Based on this analysis, it is not expected that the project will significantly adversely affect any entire population of a sensitive plant species.

Based on observed habitat and known range and natural history, it is determined that western mastiff bat (*Eumops perotis californicus*) has potential to occur throughout the project limits, and western burrowing owl (*Athene cunicularia*) has potential to occur within milepost 1.5 through 3.5. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) requires surveys for western burrowing owl, if suitable habitat exists. Suitable habitat is present within milepost 1.5 through 3.5.

Preconstruction surveys for western burrowing owl will be conducted by a qualified biologist; individuals located within areas of disturbance that cannot be avoided will be relocated in addition to passive relocation through temporary closure of observed unoccupied burrows. If western mastiff bats are found during construction in potential areas of disturbance, then the biological monitor will move them to a safe location. Based on this analysis, it is not expected that the project will significantly adversely affect any individual species or populations or significantly modify the existing habitat.

Mitigation Measure BIO-1: Limit construction activities that adversely affect native vegetation communities along milepost 3.5 and provide a revegetation plan for temporary impacts, using approved native seed mix.

Mitigation Measure BIO-2: Project biologist will be responsible for monitoring and documenting compliance with the project's biological resource requirements along milepost 3.5. The biologist will visit the project at least once a week during work along milepost 3.5.

Mitigation Measure BIO-3: Project biologist will be responsible for monitoring and documenting compliance with the project's environmental resource requirements. The biologist will visit the work site once every two weeks to ensure compliance.

Mitigation Measure BIO-4: Project biologist will conduct preconstruction surveys for nesting birds from February 15 through August 30 to maintain compliance with the Migratory Bird Act. If nesting birds are discovered within work limits, implement protective measures and prohibit vegetation clearing between February 15 and August 30.

Mitigation Measure BIO-5: Within thirty days of ground-disturbing construction activities, project biologist will conduct preconstruction surveys along milepost 1.5 through 3.5 for burrowing owl to maintain compliance with MSHCP. Individuals or occupied burrows discovered within 50 meters (approximately 160 feet) of ground-disturbing activities that cannot be avoided will be relocated according to California State Fish and Game protocol.

Mitigation Measure BIO-6: Within thirty days of ground-disturbing activities or during appropriate blooming periods a qualified botanist will conduct preconstruction surveys within 100 feet of work areas along milepost 3.5 for Nevin's berberry (*Berberis nevini*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), and round-leaved filaree (*California macrophylla*), if suitable habitat is present. If discovered, these plants will be flagged and avoided, if feasible. If avoidance is not feasible, these plants will be salvaged and relocated in adjacent suitable locations along the ROW that will not be affected by construction or maintenance activities.

- 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 U.S. Fish and Wildlife Service?**

NO IMPACT. The project occurs in urbanized areas of the City of Riverside, and would not cross riparian habitat or other sensitive natural community. It is determined that the project would not affect riparian habitat or other sensitive habitat.

- 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?**

NO IMPACT. The project occurs in urbanized areas of the City of Riverside, and would not cross any federal protected wetlands. It is determined that the project will not affect wetlands.

- 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?**

NO IMPACT. The project occurs in urbanized areas of the City of Riverside, and would not interfere 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. Milepost 3.5 falls within Criteria Cells 634 and 719 of Proposed Constrained Linkage 7 of the MSHCP. Proposed Constrained Linkage 7 focuses on the conservation of upland habitat, including coastal scrub and grassland habitat, to facilitate species dispersal. Conservation within Cell 634 is focused on the eastern portion of the cell. Milepost 3.5 would occur within the southwestern corner of the cell and not in the area targeted for conservation. Conservation in Criteria Cell 719 focuses on coastal sage scrub and

grassland habitat, and will range from 15 percent to 25 percent of the Cell with a focus on the southeastern portion. Milepost 3.5 would occur within the northwestern corner of the cell and not in the area targeted for conservation. It is determined that the project would not affect movement or migration or impede access to nursery sites.

- e) **Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?**

LESS THAN SIGNIFICANT IMPACT. The project will work with the Urban Forester to preserve, trim, or remove trees in compliance with the City of Riverside Urban Forest Policy.

- 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?**

LESS THAN SIGNIFICANT IMPACT. The project will comply with MSHCP requirements. Surveys have been completed and will be conducted as described above in 3.4(a). Milepost 3.5 falls within Criteria Cells 634 and 719 of Proposed Constrained Linkage 7 of the MSHCP. Proposed Constrained Linkage 7 focuses on the conservation of upland habitat, including coastal scrub and grassland habitat, to facilitate species dispersal. Conservation within Cell 634 is focused on the eastern portion of the cell. Milepost 3.5 would occur within the southwestern corner of the cell and not in the area targeted for conservation. Conservation in Criteria Cell 719 focuses on coastal sage scrub and grassland habitat, and will range from 15 percent to 25 percent of the Cell with a focus on the southeastern portion. Milepost 3.5 would occur within the northwestern corner of the cell and not in the area targeted for conservation.

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3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 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 as defined in California Code of Regulations Section 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 geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the Project:

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?**

LESS THAN SIGNIFICANT IMPACT.

Reviews of California Historic Resource Information System (CHRIS) records at the Eastern Information Center (EIC) at the University of California, Riverside were performed in 2006

and again in 2007 (Smith 2006; Manney 2007; URS 2007) for all 69kV subtransmission line segments. Additional sources of information included the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), National Historic Landmarks (NHL) and other sources. URS (2007) also reviewed the Historic Preservation Element of the City of Riverside General Plan, as well as the city Historic Resource Inventory Database that includes 108 City Landmarks, over 1,000 Structures of Merit, 9 historic districts, 3 Neighborhood Conservation Areas (NCA), and 20 NRHP properties.

In 2007, URS conducted a systematic field survey of the project area to document cultural resources within and near the project boundaries. Staff revisited individual properties identified in the city database and other historic resources. The historic architectural survey consisted of an initial windshield reconnaissance of specific neighborhood areas along alternative corridor routes. If apparent historic structures (i.e., structures over 50 years old) were present, neighborhood streets were subject to pedestrian survey. Given the number of structures present, detailed documentation of individual structures was not conducted.

The transmission corridors within the city of Riverside are mostly in developed areas. Typically, buildings and structures must be at least 50 years old before they can be considered eligible for the NRHP or the CRHR. With the city of Riverside having a population of nearly 50,000 in 1950 and nearly 100,000 by 1960, there are numerous buildings and structures over 50 years old. In fact, an inventory in the 1970s by the City revealed over 5,000 pre-1945 buildings (APPS 2003). Currently, 22 properties in Riverside are listed in the NRHP. Most of these are in downtown Riverside and include the Mission Inn, churches, houses, a Masonic Temple, a YWCA building, an auditorium, fruit processing buildings, a railroad depot, schools, a post office, a library, and entire neighborhoods.

Three CHLs (Parent Washington Navel Orange Tree, Mission Inn, and the site of the crossing of the Santa Ana River by Lt. Col. Bautista de Anza) and two NHLs (Harada House, Mission Inn) are also in the Riverside area.

Fifteen NRHP-listed buildings and structures and one CHL, the Mission Inn, are located within 0.5 mile of one or more of the Riverside – La Colina segments. These resources are in downtown Riverside and include houses, churches, a school, a post office, commercial buildings, and other buildings. None of these properties would be directly impacted by the 69kV subtransmission line.

City-designated historic landmarks and districts are considered historical resources under CEQA. The 108 landmarks identified by the City of Riverside include many of the NRHP-listed properties mentioned above as well as other buildings, parks, bridges, and noteworthy trees. The City of Riverside has also identified 24 actual or potential historic districts and NCAs that have historic value. Those in the vicinity of the STP corridors include Seventh Street East Historic District, Citrus Thematic Industrial Potential Historic District, Ninth Street Potential NCA, Lafayette Street Potential NCA, Arlington Village Residential Potential NCA, and Arlington Village Commercial Potential NCA. The route avoids these districts and NCAs.

The 69 kV route passes through the Downtown, Eastside, University, and Canyon Crest neighborhoods. Eastside, established in the late 1880s, is one of the oldest residential neighborhoods in the city. Most of the homes in this neighborhood were constructed during the 1950s or earlier. The University neighborhood surrounds the University of California, Riverside campus; consists largely of residential architecture dating between 1960 and 1980; and includes

student housing, a commercial center, and hillside housing. Canyon Crest is one of the largest neighborhoods in Riverside and reflects modern, low density architectural design.

The entire segment of the route located in the Eastside neighborhood and the segment that parallels Martin Luther King Jr. Boulevard in the University neighborhood were intensively surveyed for architectural resources. The remainder of the route in the University and Canyon Crest neighborhoods were intuitively surveyed for cultural resources (i.e., only areas that appeared to have potential to contain cultural resources were examined closely).

URS identified one City Landmark in the University neighborhood and 16 City Structures of Merit and one City Landmark in the Eastside neighborhood. However, URS did not systematically document all structures over 50 years old along the route.

In general, the project was evaluated for potential impacts to historical resources that could include physical damages to the actual structure or visual impacts through changes in the setting of visually sensitive buildings or neighborhoods. The project route would not result in physical impacts to architectural resources. While the Eastside neighborhood retains a high level of historical integrity (URS 2007), the existing neighborhood also includes numerous power poles and distribution lines. With the addition of similar structures and lines by the project, it would not adversely affect the historic integrity of the neighborhood.

In summary, the project route would not result in adverse physical or visual changes to the significance of historical resources.

The upgrades to all existing substations would take place within the existing boundaries of each substation. No historical resources would be impacted.

b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION.

The records searches did not identify any previously recorded archaeological resources within 0.5 mile of the 69 kV route. Additionally, no new archaeological resources were discovered during the intensive and intuitive pedestrian surveys of the route. Native American groups that were contacted identified locations close to mountainous terrain and near the river as sensitive. The University neighborhood is not close to the river, and hillier undeveloped terrain is mostly along Interstate 215 near milepost 2.4 through 3.5. Most of the City of Riverside has been developed and was of limited interest to tribal representatives although representatives considered the entire project area to have moderate to high sensitivity for Native American resources (Toupal 2007).

Although the project area is highly developed, some areas along the route with less disturbance may yield currently undiscovered archaeological artifacts or sites.

Approximately 1,700 feet of existing distribution circuits will be placed in a trench 18 inches wide and 5 feet deep within existing asphalt streets. The trench will be principally along 10th Street in the historic Eastside Neighborhood. The Eastside Neighborhood was established in 1887 as a 100-acre addition to the city of Riverside. The neighborhood was originally serviced by underground pipes from the Gage Canal system (URS 2007). It is possible, therefore, that irrigation features and other archaeological remains exist beneath the surface of the street.

The upgrades to all existing substations would take place within the existing boundaries of each substation. No archaeological resources would be impacted.

Physical impacts to any unknown archaeological resources can be reduced to a less than significant level implementing cultural resource mitigation measures CUL-1.

Mitigation Measure CUL-1: Should previously unrecorded cultural resources be discovered during construction, construction will be halted until a professional archaeologist has had the opportunity to investigate the resource and assess its significance. Any such resource uncovered during the course of project-related grading or construction shall be recorded and/or removed per standard archaeological practice and/or applicable City and/or state regulations.

- c) **Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?**

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION.

No paleontological studies have been conducted along the subtransmission line for this project. The project area is urbanized and it is unlikely that paleontological deposits would be visible during a pedestrian survey. However, older Pleistocene alluvium deposits underlie part of the City of Riverside and significant vertebrate paleontological resources are known to be present in these deposits in other parts of Riverside County (SWCA 2007).

The upgrades to all existing substations would take place within the existing boundaries of each substation. No paleontological resources would be impacted in these areas.

Potential impacts to paleontological resources can be reduced to a less than significant impact by implementing mitigation measures CUL-2.

Mitigation Measure CUL-2: Prior to construction a professional paleontologist shall be consulted regarding the sensitivity of the proposed area of approximately 1,700 feet of trenching for containing for vertebrate paleontological resources. If recommended by the paleontologist, on-site monitoring of construction activities will be conducted during excavation of the trench. Should background research or field observation indicate that the ground is already disturbed to a depth greater than 5 feet (the anticipated maximum depth of the trench), the paleontologist may determine that further monitoring is not needed. In the event that paleontological findings are discovered during construction, construction will be halted until a professional paleontologist has had the opportunity to investigate the resource and assess its significance.

- d) **Disturb any human remains, including those interred outside of formal cemeteries?**

LESS THAN SIGNIFICANT IMPACT.

No human remains have been identified in the proposed project area. Therefore, it is anticipated that the project would not disturb any human remains. However, potential to discover human remains, either historic or prehistoric, exists during ground disturbing construction activities.

The upgrades to all existing substations would take place within the existing boundaries of each substation. No human remains would be disturbed.

The California Health and Safety Code (Section 7050.5) states that if human remains are discovered on the Project site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. As adherence to state regulations would be required, no mitigation would be required in the unlikely event human remains were discovered on the Project site. Impacts associated with this issue would be less than significant.

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3.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

Would the Project:

a) **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? Refer to Division of Mines and Geology Special Publication 42.**

NO IMPACT. The project alignment is not located within a known active Earthquake Fault Zone as defined by the California Geological Survey (CGS, 2007).

ii. **Strong seismic ground shaking?**

LESS THAN SIGNIFICANT IMPACT. The scope of the project's design, construction, and management practices will provide appropriate seismic design of foundations in accordance with current industry standards, which would reduce the strong seismic ground shaking impacts to less than significant.

iii. **Strong-related ground failure, including liquefaction?**

LESS THAN SIGNIFICANT IMPACT. Portions of the project alignment cross areas mapped as having soil that have a moderate potential for liquefaction. Site specific geotechnical engineering recommendations to reduce seismic-related ground failure to less than significant may include site grading modification, foundation design, and/or ground improvement. The scope of the project's design, construction, and management practices would be used for appropriate design of pole foundations to reduce the potential of seismic-related ground failure and liquefaction to less than significant levels.

iv. **Landslides?**

NO IMPACT. The susceptibility of land (slope) failure is dependent on slope and geology as well as the amount of rainfall, excavation or seismic activities. A landslide is a mass of rock, soil, and debris displaced down-slope by sliding, flowing, or falling. Steep slopes and down-slope creep of surface materials characterize areas most susceptible to landsliding. The project site and surrounding areas are relatively flat. Hillside areas are underlain by granitic bedrock which is not prone to landslide (Morton et al, 2001b). Construction activities would not change topography and would have no risk of causing landslides. The proposed STP would be designed and constructed in accordance with California Building Code requirements. Therefore there would be no impact from the proposed Sub Transmission Project.

b) **Result in substantial soil erosion or the loss of topsoil?**

NO IMPACT. The excavation/construction of individual structure foundations would have no impact on soil disturbance. The project alignment is within developed area of the City of Riverside and construction would not result in substantial soil erosion or loss of topsoil.

- 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?**

LESS THAN SIGNIFICANT IMPACT. The project site and surrounding area are underlain by a geologic unit that is generally dense, topographically level, and stable with a low to moderate liquefaction potential. The scope of the project's geotechnical design, construction, and management practices will provide for appropriate foundation design and site development to reduce the potential of causing instability of soils or the occurrence of on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse to a level of less than significant.

- 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?**

NO IMPACT. The STP is located in an area underlain by sandy older alluvium or granitic bedrock (Morton et al, 2001b). These geologic units are non-expansive as defined by the UBC.

- 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?**

NO IMPACT. Septic systems are not part of the proposed project.

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-

3.7 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 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 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"/>
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 checked="" type="checkbox"/>	<input 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"/>

Would the Project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

LESS THAN SIGNIFICANT IMPACT. During project construction activities (installation of the 69 kV subtransmission line and modifications to the substations), limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. would be used for vehicles and motorized equipment. Accidental spill of these substances could impact water and/or groundwater quality. These materials would be present in relatively minor quantities. Operation of the project would not result in the use of any potentially hazardous materials. The transport, use, and disposal of hazardous materials during the construction of the proposed project would be conducted in accordance with applicable Federal, State, and local requirements. The project will also be subject to oversight by the City of Riverside Fire Department. Compliance with applicable laws and regulations, as well as oversight by the City of Riverside Fire Department, would ensure that the impact associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

- 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?**

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION INCORPORATION. It is not anticipated that construction or operation of the project would create a significant hazard to the public due to project upset or accidental release of hazardous materials into the environment. Accidental release of hazardous materials routinely used during construction activities are addressed in section a), above.

Treated wood poles associated with the 69 kV subtransmission lines to be removed under the project would be disposed of as waste by an RPU vendor pursuant to RPU waste management and agency requirements (RPU 2008). Impacts related to the removal and disposal of treated wood would be less than significant.

Equipment and material that would be removed from the substations would be removed using standard utility practices, while adhering to all federal, state, and local laws in regards to hazardous materials containment, control, and transport. Transformers that would be removed from substations would be taken to RPU's Distribution Equipment Maintenance Center, where the transformer oil would be processed and disposed. RPU has an existing contract with a waste disposal vendor who would provide waste management services for the project, including characterization, profiling, manifesting, transportation, and disposal of toxic wastes generated during construction. Impacts related to the removal, disposal, and/or recycling of existing substation and other transmission equipment would be less than significant.

Impact: Subsurface construction activities could release previously unidentified hazardous materials into the environment. This would be a less than significant impact with implementation of Mitigation Measure HAZ-1.

Mitigation Measure: HAZ-1 RPU's Hazardous Substance Control and Emergency Response Plan shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the Plan shall

include immediately stopping work in the contaminated area and contacting appropriate resource agencies, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of Federal, State and local agencies and primary, secondary, and final cleanup procedures. The Hazardous Substance Control and Emergency Response Plan shall be approved by RPU prior to the commencement of construction activities.

- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

LESS THAN SIGNIFICANT IMPACT. Four existing schools (University of California Riverside, Kaplan College, Lincoln High School, and St. Francis de Sales) and no proposed schools were identified within one-quarter mile of the project. Construction and operation of the project would not be expected to result in releases of hazardous emissions, substances, or waste. While some hazardous materials would be present on the site during construction, the materials would be typical of those used at construction sites and would be handled in accordance with applicable Federal, State and local requirements. As the project would not emit hazardous emissions and would handle hazardous materials in accordance with applicable requirements, impacts would be less than significant.

- 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?**

LESS THAN SIGNIFICANT IMPACT.

According to the FirstSearch report (FirstSearch 2008), The Project would not be located on a site with known hazardous materials contamination. However, other hazardous material sites were identified near or in the vicinity of the Project site (see FirstSearch report - Appendix D). One site in particular was identified in the immediate vicinity of the project (So Cal Gas/Riverside MGP-10th Street and Howard). According to DTSC's EnviroStor, the So Cal Gas/Riverside MGP site is a former manufactured gas plant, and is currently occupied by a truck terminal. The area is an active contamination site with soil containing elevated levels of polycyclic aromatic hydrocarbons (PAHs) total petroleum hydrocarbons (TPHs), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), benzidine, lead and arsenic. The selected remedial alternative action includes the excavation and removal of contaminated soils for treatment and/or disposal, followed by the backfilling of the excavated areas with clean soils. The targeted excavation area is less than 2 acres in size. The targeted area of remediation (AOR) includes the entire Former MGP Site as well as portions of the adjoining property that lie beyond the original MGP Site boundaries. The proposed AOR is approximately 65,000 square feet with depths of MGP-related impact varying from 5 feet to greater than 30 feet. According to an excavation map provided to the DTSC for the Site, the 69 kV subtransmission line does not cross contaminated soil initially targeted for removal.

- 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?**

NO IMPACT. No airports are located within two miles of the project vicinity. The Riverside County Airport Land Use Commission (ALUC) evaluates the land use compatibility of airports within the County of Riverside and the surrounding community. The Riverside ALUC has established "Airport Influence Areas" which apply to all properties located within

a two-mile radius of each municipal airport (City of Riverside Municipal Code, Chapter 12.14). The closest airport (Flabob Airport) is located approximately 2.42 miles away from the Project area, thus the project would not be subject to its airport land use plan and would not result in a safety hazard for local residents or workers.

- 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. There are no known private airstrips located within 2 miles of the project area; therefore no project-related safety hazards would result for residents living or working within the project vicinity.

- g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

LESS THAN SIGNIFICANT IMPACT. Several roadways that would be crossed by the project would likely need to be temporarily closed during 69 kV subtransmission line stringing activities. These roadways could be used by people evacuating the area during an emergency. However, in the event of an emergency, construction crews would cease all work and would remove any equipment that would impede the flow of traffic. Access for emergency vehicles would be maintained throughout project construction. Although project construction activities may require temporary road closures, appropriate traffic control plans would be followed, and street opening permits would be obtained from the City of Riverside (see Traffic and Transportation). Therefore, the project would not physically interfere with emergency response or evacuations. Impacts would be less than significant.

- 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?**

LESS THAN SIGNIFICANT IMPACT. The project is located within an area of the City of Riverside that consists mainly of urban, agricultural land and open space. The Sycamore Canyon urban/rural interface area is located near the south of the project area and is considered at risk of fire. The project, however, is not within a high or moderate fire hazard area. Conductors of the new 69 kV subtransmission line could fall on trees (or vice-versa) and/or vegetation along the subtransmission line corridor potentially resulting in fire. To minimize the risk of trees falling on the subtransmission line or other accidental ignition of a fire from the sub-transmission line, RPU follows guidelines such as: CPUC General Order 95, Public Resources Code Section 4293, RPU's Subtransmission Right of Way Vegetation Management Program and Subtransmission Routine Patrol Standard; International Society of Arboriculture's pruning guidelines; and the American National Standards Institute (ANSI) A300 Pruning Standards. Implementation of the Project would not result in a significant risk of loss, injury, or death involving wildland fires.

Sources

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3.8 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Would the Project:

a) **Violate any water quality standards or waste discharge requirements?**

LESS THAN SIGNIFICANT IMPACT. Construction of the project would require water, as necessary, to control fugitive dust. Fugitive dust emission at construction sites would be controlled by water trucks equipped with spray nozzles. Construction of the project also has the potential to cause soil erosion, which could result in impacts to downstream water quality. Potential runoff from equipment wash-off areas could also affect water quality. These impacts are less than significant with standard project practices and implementation of a SWPPP. Implementation of the required SWPPP would assure all water quality standards and waste discharge requirements are satisfied.

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)?**

NO IMPACT. Groundwater supplies and recharge would not be affected by construction or operation of the project; therefore, no impact would occur.

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?**

NO IMPACT. The course of streams or rivers would not be altered as a result of the project. Existing drainage patterns would not be altered.

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?**

NO IMPACT. Substantial alteration of existing drainage patterns, including the alteration of the course of a stream or river, would not occur during construction of the project. Some vegetation removal and soil disturbance would occur during construction. However, the amount would be small and not result in the potential for substantial increased surface runoff that would result in flooding on or off site.

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?**

LESS THAN SIGNIFICANT IMPACT. During construction of the project, surface water runoff during a storm event could be increased; however, even with the increase, it is not expected to exceed the capacity of existing stormwater drainage systems. Further, implementation of the required SWPPP would minimize the potential for surface water runoff, as well as the potential to create or contribute substantial additional sources of polluted runoff, to a less than significant level.

f) **Otherwise substantially degrade water quality?**

LESS THAN SIGNIFICANT IMPACT. Short-term erosion could potentially occur during construction activities, including backfilling, which could adversely affect surface water quality from runoff water. However, due to the linear nature of the project and the limited area of ground disturbance, this impact is not substantial and would be less than significant.

Construction equipment and waste containers may potentially leak contaminants, increasing the possibility of washing contaminated runoff into nearby stormwater drainage systems or water bodies; however, the amount of contaminants leaked in this manner is typically relatively small. In comparison, contamination resulting from spills at staging and refueling sites would create a greater risk to water quality if leaked or spilled contaminants were washed into stormwater drainage systems or waterbodies during a storm event. Implementation of the required SWPPP would ensure that the potential for water quality degradation resulting from construction of the project would be less than significant.

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?**

NO IMPACT. Construction and operation of the project would not involve the placement of houses within a 100-year flood hazard area.

h) **Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

NO IMPACT. Although construction of the project would result in the placement of poles in a 100-year flood hazard area (Link 2 and Link 5), this area is a heavily developed residential and light industrial area, and it is not expected that placement of a subtransmission line would impede or redirect potential flood flows.

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?**

NO IMPACT. Construction and operation of the project would not cause or increase the likelihood of failure of a levee or dam that could result in flooding. As such, the project would not expose people or structures to a significant risk of loss, injury, or death involving flooding.

j) **Inundation by seiche, tsunami, or mudflow?**

NO IMPACT. The project area is not located near a body of water that would cause a seiche or tsunami. Although there are hills in the project area, mudflows are not likely to result from construction or operation of the project; therefore, no impacts resulting from seiche, tsunami, or mudflow would occur.

Sources

(SWRCB, 2006). California Water Boards, State Water Resources Control Board, California Environmental Protection Agency, Division of Water Quality. November 2006. Staff Report

Volume I. Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments.
 (SARWQCB, 2004). Santa Ana Regional Water Quality Control Board (8), 2004. Watershed Management Initiative Chapter. Revised November 2004.
 U.S. Geological Survey. *Riverside East quadrangle*, California [map]. 1:24,000. 7.5 Minute Series. Washington, D. C.: USGS, 1980.

3.9 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the Project:

a) Physically divide an established community?

LESS THAN SIGNIFICANT IMPACT. The new 69 kV subtransmission line and associated substation upgrades would not result in physical features that would divide the established community in the project area. Nor would they induce changes in land use that would be expected to have this result. No walls or other physical barriers for the project would physically divide established communities. In addition, substation upgrades would occur within the existing substation sites and the subtransmission line would be constructed primarily along existing right-of-ways or adjacent to them. Therefore, the project would have a less than significant impact to the physical division of an established community.

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?

LESS THAN SIGNIFICANT IMPACT. Modifications required to upgrade the existing Freeman, Hunter, La Colina, Orangecrest, Riverside, Springs, University and Vista Substations (grading or site development work) would occur within the existing substation boundary or footprint. The new 69 kV subtransmission line would traverse a variety of land use types in the City of Riverside (which includes the UCR Campus).

Applicable land use planning documents associated with the project include the Riverside General Plan 2025, UCR 2005 Long Range Development Plan (LRDP) and UCR West Campus Area Plan. The General Plan 2025 is intended to implement the community's vision for what Riverside can be in the next 20 years. The Plan is used to guide decisions, actions, strategic planning, and development. The project is consistent with the objectives and policies specified in the Public Facilities and Infrastructure Element of the Riverside General Plan 2025. More specifically, Objective PF-6 states "Provide affordable, reliable and, to the extent practical, environmentally sensitive energy resources to residents and businesses." Policy PF-6.2 further states "Ensure that adequate back-up facilities are available to meet critical electric power needs in the event of shortages or temporary outages." The project is also exempt from Title 19 of the City of Riverside's Municipal Code and as such, a conditional use permit is not required.

As a State entity, the University of California Riverside is not subject to local zoning ordinances and associated requirements established by the City. The UCR 2005 LRDP guides the physical development of the UCR campus to accommodate 25,000 students by the year 2015/16 (or until a new LRDP is approved by The Regents). The LRDP would not expire in 2016, and it would remain in effect until a new LRDP is prepared. The plan describes preferred land uses and projects future space needs to accommodate projected enrollment growth and to support the University's academic goals. The magnitude of growth proposed for the campus under the 2005 LRDP is substantial and will change the character of UCR. To support this growth, utilities and infrastructure improvements will be implemented to serve the additional facilities necessitated by the anticipated enrollment growth at UCR. Significant new systems will be required to service the West Campus, since it has been in agricultural cultivation for teaching and research and has few existing utilities or infrastructure.

This project would only serve to assist with UCR's LRDP.

c) **Conflict with any applicable habitat conservation plan or natural community conservation plan?**

NO IMPACT. The project would not conflict with any applicable government-adopted habitat conservation plan or natural community conservation plan. The project will traverse mostly urban lands which have been previously developed. Within the project, the Western Riverside County MSHCP has been implemented for the protection of sensitive species and their critical habitat. However, no criteria cells for the MSHCP were identified in the project vicinity. Therefore, the project would not result in any conflicts with an adopted habitat conservation plan or natural community conservation plan.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025*.

University of California, Riverside. November 2005. *UCR 2005 Long Range Development Plan*.

University of California, Riverside. March 2003. *West Campus Area Plan*.

Western Riverside County MSHCP 2001. Department of Earth Sciences, University of California, Riverside California [<http://ecoregion.ucr.edu/>]

3.10 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

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?**

NO IMPACT. According to the Riverside General Plan 2025, the project area is designated MRZ-4, Mineral Resource Zone - 4 and there is insufficient data to assign any other MRZ designation. Since no known mineral resources are located within the Project area, no impact to the loss of availability of mineral resources is expected.

- 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?**

NO IMPACT. Refer to response 3.10A.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025.*

3.11 NOISE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

Would the Project:

- 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?**

LESS THAN SIGNIFICANT IMPACT. Sound level impacts for noise sensitive areas in the project area are based on an A-weighting of sound intensities that best reflects the human ear's reduced sensitivity to low frequencies. These sound intensity levels correlate well with human perceptions of the annoying aspects of noise. Noise environments and consequences of human activities are usually well represented by an equivalent A-weighted sound level over a given time period (Leq) or by the average day-night noise levels (Ldn).

Construction noise can be created from on-site and off-site sources. On-site noise sources would principally consist of the operation of heavy-duty diesel and gasoline-powered construction equipment. Off-site noise sources would include vehicles commuting to and from the job site, as well as from trucks transporting material to the staging areas or construction right-of-way.

On-site construction noise would occur primarily from construction equipment (e.g., backhoes, cranes). Anticipated noise levels from this equipment would range from 70 dBA to 100 dBA at a distance of approximately 50 feet. It should be noted that noise levels are calculated based on the assumption that noise from a localized source is reduced by approximately 6 dBA with each doubling of distance from the source of noise. Direct noise impacts would result from construction activities occurring adjacent to sensitive receptors such as houses and recreation areas. However, this noise would be short term and intermittent during periods of construction. Construction activities would move along the 3.6 mile 69 kV subtransmission line route and would not result in extended construction in any one area.

Off-site noise during construction would occur primarily from commuting workers, and from various truck trips to and from the construction sites. It is assumed that truck trips would be required to haul structures, conductor line, and other materials to the construction sites. The peak noise levels (approximately 70 to 75 dBA at 50 feet) associated with passing trucks and commuting worker vehicles would be short-term in duration and would generate adverse, but less than significant impacts.

Noise levels generated in the City of Riverside would be subject to established standards. These noise standards form the basis for the impact significance analysis contained in this Environmental Initial Study and are summarized below.

City of Riverside Municipal Code, Title 7 of the City of Riverside Municipal Code contains noise control regulations; Section 7.35.010, *General Noise Regulations*, contains the following requirements applicable to the proposed project:

B. It is unlawful for any person to make, continue, or cause to be made or continued any disturbing, excessive or offensive noise which causes discomfort or annoyance to reasonable persons of normal sensitivity. The following acts, among others, are declared to be disturbing, excessive and offensive noises in violation of this section:

5. Construction: Operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, grading or demolition work between the hours of 7:00 p.m. and 7:00 a.m. on week days and between 5 p.m. and 8 a.m. on Saturdays or at any time on Sunday or federal holidays such that the sound therefore creates a noise disturbance across a residential or commercial property line or at any time exceeds the maximum permitted noise level for the underlying land use category, except for emergency work or by variance. This section does not apply to the use of domestic power tools.

Within the City of Riverside, noise impacts from the project site are not considered significant when construction activity occurs during the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturday. The construction activity of the proposed project would not occur outside the hours of allowable construction activity and, thus, the maximum permitted noise level limits for the underlying land use categories would not apply.

In summary, project construction activities would occur during allowable hours, and temporary construction noise impacts would be less than significant. Nonetheless, RPU recognizes that, while temporary and not a significant impact according to CEQA, construction noise would likely be perceived as disruptive and annoying to some residents and businesses along the proposed project alignment. Accordingly, RPU has committed to utilize noise reduction features (e.g., mufflers, engine shrouds) that are no less effective than those originally installed by the manufacturer for construction equipment used for the

proposed project. Furthermore, the Construction Contractor will place stationary construction equipment so that emitted noise would be directed away from sensitive receptors (i.e., residences).

Audible power line noise, known as corona, occurs with high voltage lines of 230 kV or greater when the localized electric field near an energized conductor is sufficiently concentrated to produce a tiny electric discharge that can ionize air close to the conductors. Corona transforms the discharged energy into very small amounts of sound, which is characterized as a random crackling or hissing sound. Lower voltage subtransmission lines, as proposed for this project (69 kV), do not typically result in noticeable increases in ambient noise levels from corona discharge. Therefore, the operational noise impact is considered to be less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

LESS THAN SIGNIFICANT IMPACT. There are no state or city regulatory standards pertaining to groundborne vibration noise. The architectural damage risk level typically suggested by most agencies is 0.2 inch per second for continuous vibration, which is one-tenth the maximum safe level for single events, such as blasting. Construction of the project would not involve the use of major equipment that would result in high levels of ground vibration, such as impact pile drivers. Construction equipment required for subtransmission line construction, including backhoes, cranes, and excavators, do not typically exceed vibration levels of 0.2 inch per second (Caltrans, 2002). Likewise, operational equipment and activities would not involve the use of any equipment anticipated to generate groundborne vibration of sufficient duration to result in an impact to nearby structures or sensitive receptors. Therefore, this impact is considered to be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

NO IMPACT. Permanent increases in ambient noise will not occur from the project. Increases in ambient noise, as defined by Chapter 7.23 of the City of Riverside Noise Ordinance, would only occur during the initial construction phases and at times of project site maintenance. Therefore, no impact would occur.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

LESS THAN SIGNIFICANT IMPACT. Minor construction noise may be audible to sensitive receptors in the project area. Increases in ambient noise levels may be generated by large vehicles bringing materials and construction crews to and from the project area and the operation of heavy construction equipment. Potential noise impacts will be limited by compliance with the City of Riverside's Noise Ordinance (Title 7), which limits construction noise that would disturb a residential neighborhood to 7:00 a.m. to 7:00 p.m. weekdays, and 8:00 a.m. to 5:00 p.m. Saturdays. No construction noise is permitted on Sundays or federal holidays. Potential operational noise would include corona discharge associated with the 69 kV subtransmission line. However, noise generated by the project will be minor, temporary, and intermittent resulting in an impact level that is less than significant.

- 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?**

NO IMPACT. The project is not located within an airport land use plan study area, or within two miles of a public airport or public use airport. The project would therefore have no impact regarding exposure of residents or workers to excessive noise levels.

- 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?**

NO IMPACT. The project is not located within the influence area of a private airstrip. The project would therefore have no impact regarding exposure of residents or workers to excessive noise levels.

Sources

California Department of Transportation (Caltrans). Division of Environmental Analysis, Office of Noise, Air Quality, and Hazardous Waste Management. *Transportation Related Earthborne Vibrations (Caltrans Experiences)*. Technical Advisory, Vibration. TAV-02-01-R9601. February 20.

City of Riverside. November 2007. *Riverside General Plan 2025*.

City of Riverside Noise Ordinance (Title 7 of the Municipal Code)

U.S. EPA. 1974. Information on Levels of Environmental Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety. EPA 550/9-74-004. 1974.

3.12 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 type="checkbox"/>	<input checked="" 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"/>

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)?**

NO IMPACT. The project would neither directly, nor indirectly, be the cause of substantial population growth. The objective of the project is to increase the transmission capacity and reliability of the existing RPU grid for the City of Riverside's current population and to accommodate future energy demands in the same geographic area. Therefore, the project construction and operation will be growth accommodating rather than growth inducing.

- b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

NO IMPACT. The project will not displace any housing units, and would therefore not require the replacement of housing at another location. As a result, no impact would occur.

- c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

NO IMPACT. The project will not displace any residents within the City of Riverside, thus the project would not necessitate the construction of replacement of housing elsewhere.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025.*

University of California, Riverside. November 2005. *UCR 2005 Long Range Development Plan.*

University of California, Riverside. March 2003. *West Campus Area Plan.*

3.13 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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 following public services:				
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

Would the Project:

- a) **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 following public services:**

Fire protection?

NO IMPACT. The project would not result in a substantial adverse impact to the provision of fire services. Increases in demand for fire services are typically associated with substantial increases in population. The project would not overburden existing fire protection services or necessitate additional services in the area. Fire protection service to the project area is adequately provided by the City of Riverside Fire Department. Proper fire-safety standards would be followed relative to construction and operations. RPU would coordinate with City of Riverside emergency personnel prior to construction to ensure that construction activities and associated lane closures would not significantly affect emergency response vehicles. The project would not result in substantial adverse impacts to fire protection and emergency response services.

Police protection?

LESS THAN SIGNIFICANT IMPACT. The Riverside Police Department and University of California, Riverside Police Department provides police protection for the Project area. The existing substations would not introduce any uses that would increase population, which would typically require additional police protection services during operation.

The project may require the occasional use of police services during construction. Theft of construction equipment and/or vandalism might occur during the construction period, requiring a police response. RPU would implement standard precautionary measures, such as securing equipment when left unattended to minimize theft and vandalism. RPU would also implement public safety measures, including the covering and securing of open holes once activity at that location is stopped, and the placement of safety structures adjacent to roadways during overhead wire installation activity to protect vehicles and pedestrians.

The placement of transmission poles may require temporary closure or partial closure of roadways for 69 kV subtransmission line construction. Such actions are typically coordinated with the local police and normally take place during off-peak commute hours. During construction, construction vehicles may temporarily slow traffic but would not prevent passage of vehicles, including emergency vehicles. The use of police services would be a temporary construction-related impact and would not be expected to affect police services substantially. The project would have a less than significant effect related to police services.

Schools?

NO IMPACT. The project would not introduce any uses that would increase population, which would typically require additional school services. Therefore, the Project would not affect existing schools nor necessitate the need for additional schools in the area.

Parks?

NO IMPACT. The project would not result in a direct increase of population growth or increased housing. Therefore, the project would not affect existing parks nor necessitate the need for additional parks in the area.

Other public facilities?

NO IMPACT. No project impacts to other government services are anticipated. The project would not require additional maintenance of public facilities during its operation. Therefore, the project would have no effect related to public facilities.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025.*

3.14 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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"/>

Would the Project:

- a) **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?**

LESS THAN SIGNIFICANT IMPACT. Increases in demand for recreational facilities are typically associated with substantial increases in population. Recreational uses along some areas of the new 69 kV subtransmission line route include passive activities such as bicycling, walking, and jogging. The 69 kV subtransmission line would be located along the edge of various roadways in the project area. Subtransmission line construction in these areas could briefly disrupt recreational activities, but long-term operation of the sub-transmission line would not interfere with recreational activities. Construction activities associated with the Project would be temporary, and therefore would not result in a substantial increased demand for recreational facilities or adversely affect City of Riverside park/population standards.

- 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 project does not include the addition of any recreational facilities nor does it require the construction or expansion of recreational facilities.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025.*

3.15 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 wither the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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)?**

LESS THAN SIGNIFICANT IMPACT. A substantial increase in daily trips to the existing street system is not anticipated in conjunction with this project. Also, since the project will not generate a significant number of additional vehicle trips, it is not anticipated that the level of service (LOS) of any nearby intersection will be affected. Therefore, no significant change to the levels of service of nearby intersections and only an incremental increase of traffic load or capacity are expected with implementation of this project. As part of the project, *street opening permits* would be required prior to construction. As part of this process, traffic control measures would be identified and imposed by the City as part of the permit.

After completion, the proposed subtransmission line would be in continuous operation. Subtransmission line maintenance and routine inspections would occur about once a year. Equipment damaged by vandals or vehicle accidents would be replaced and periodic tree trimming (if necessary) would be performed to prevent interference with the lines.

- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

LESS THAN SIGNIFICANT IMPACT. Refer to Response 3.15a, above. The Congestion Management Program (CMP) was first established in 1990 under Proposition 111. Proposition 111 established a process for each metropolitan county in California to designate a Congestion Management Agency (CMA) that would be responsible for development and implementation of the CMP within county boundaries. The Riverside County Transportation Commission (RCTC) was designated as the CMA in 1990, and therefore, prepares the CMP updates in consultation with the Technical Advisory Committee (TAC), which consists of local agencies, the County of Riverside, transit agencies, and sub regional agencies. The intent of the CMP is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality. At the conclusion of construction, it is anticipated that the project will not generate a significant number of additional vehicle trips, nor is it anticipated that the LOS of nearby intersections will be affected. Therefore, as the project will not cause exceedance either individually or cumulatively a level of service standard established by the CMP a less than significant impact is expected.

- 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?**

NO IMPACT. The project would not change air traffic patterns. The project would not require the use of helicopters or other aircraft.

- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

LESS THAN SIGNIFICANT IMPACT. The project would not result in an increase in hazards due to a design feature or incompatible use and less than significant impacts are expected. In addition, temporary roadway obstruction during the construction phase of the project could substantially increase hazards due to the use of construction barriers and equipment. These obstructions would be for a limited period of time and would be necessary to improve public safety in the areas where infrastructure is being installed.

- e) **Result in inadequate emergency access?**

LESS THAN SIGNIFICANT IMPACT. As indicated for Question a), traffic associated with project construction may have a temporary effect on existing traffic circulation patterns. Therefore, it may also affect emergency access. The construction contractor would use standard procedures to minimize the length of time that residential and business driveways would be blocked. No roadways would be closed to through traffic during project construction; at least one lane would always be open. Emergency vehicles would be able to pass through the project area without obstruction. Multiple access points are also located in the project area. Traffic control measures would be identified and imposed by the City as part

of a street opening permit. No private driveway along the project alignment would be closed overnight or for more than half a day. The construction contractor would notify a property owner by telephone or by posting a notice on the property at least 24 hours prior to blocking a property owner's driveway.

f) Result in inadequate parking capacity?

LESS THAN SIGNIFICANT IMPACT. The project would create limited new, temporary parking demand for construction workers and construction vehicles as the crew moves along the installation alignment. The project would not generate a substantial number of construction workers along the alignment at any one location; therefore, the number of parking spaces required would not be substantial. Although some construction workers would park at a substation or staging area, some would park near that day's construction site and would require additional construction zone to accommodate parking needs. Nonetheless, given the proposed rate of subtransmission line installation, impacts would be relatively brief at any one location along the alignment. Construction workers for the upgrades at the existing substations would park on-site. The street opening permit will also address impact on existing parking and notification to affected residences.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION. The project would have no long-term impact on demand for alternative transportation or on alternative transportation facilities. Fixed route transit services and demand response (dial-a-ride) transit services are provided by the Riverside Transit Agency (RTA) for the western portion of Riverside County. Currently, RTA operates a number of fixed bus routes and demand responsive services within 2,500-square mile area of western Riverside County. RTA currently operates several bus routes within and in the vicinity of the project site, specifically routes that utilize Chicago Avenue. The project would not impact existing bus routes in the area. Project construction activities, however, could disrupt railroad operations along a railroad right of way.

Impact: Project construction activities could disrupt railroad operations along a railroad right of way. This would be a less than significant impact with implementation of Mitigation Measure TRA-1.

The project would have no long-term impact on demand for alternative transportation or on alternative transportation facilities. However, construction of the project would have the potential to disrupt rail traffic along a shared railroad right of way utilized by Union Pacific Railroad, Burlington Northern Santa Fe Railway, Metrolink and Amtrak. Subtransmission line stringing activities would be required over the railroad. Similar to subtransmission line stringing activities over roads, stringing over a railroad could temporarily disrupt train movements. However, implementation of Mitigation Measure TRA-1 would require RPU to coordinate all activities within the shared railroad ROW with Union Pacific Railroad, Burlington Northern Santa Fe Railway, Metrolink, and Amtrak in order to schedule transmission line stringing activities within the shared railroad ROW so that railroad traffic would not be impacted. Implementation of Mitigation Measure TRA-1 would ensure that impacts to railroad operations would be less than significant.

Mitigation Measure: TRA-1 RPU will coordinate all construction activities with the shared railroad ROW with Union Pacific Railroad, Burlington Northern Santa Fe Railway, Metrolink, and Amtrak in order to schedule transmission line stringing activities so that railroad traffic would not be impacted.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025*.

3.16 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 projects 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Would the Project:

- a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

NO IMPACT. Project activities would not increase wastewater generation and would not exceed wastewater treatment requirements. As a result, no impact would occur.

- 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?**

NO IMPACT. Little water or wastewater demand would be placed on utility and service systems during Project construction activities, and no demand on utility and service systems

during project operation. New or expanded water or wastewater treatment facilities would not be required as a result of project implementation; therefore, no impact would occur.

- 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?**

NO IMPACT. The project would not require the construction of new storm water drainage facilities or the expansion of existing facilities. New or expanded storm water drainage facilities would not be required as a result of project implementation. Therefore, no impact would occur.

- d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

NO IMPACT. Water would only be needed for dust suppression purposes during construction of the 69 kV subtransmission line. It is expected that water would be provided via water trucks. The amount of water that would be used during the 1- to 2-month construction period is not expected to be a significant amount. In addition, no water would be required to operate the project. Therefore, no impact would occur.

- 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?**

NO IMPACT. The project would not result in an increase in wastewater treatment and will thus have no impact associated with wastewater treatment capacity. Therefore, no impact would occur.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?**

LESS THAN SIGNIFICANT IMPACT. Project construction activities would result in the generation of construction waste material. In addition, the project would require the removal and disposal of approximately 75 wood poles, which would be disposed of in accordance with RPU's treated wood protocol. The poles would be disposed of in an appropriate landfill that has sufficient capacity to accept the material. This short-term disposal activity would place only a minor demand on the capacity of existing landfills, and would not require the development of new or expanded landfills. Operation of the 69 kV subtransmission line would not result in the generation of additional solid waste. Therefore, the project would not adversely impact existing capacities of landfills.

- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

NO IMPACT. The project would comply with federal, state, and local statutes and regulations related to solid waste. Therefore, no impact would occur.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025*.

3.17 MANDATORY FINDINGS OF SIGNIFICANCE

Does the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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) 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"/>

Does the Project:

- a) **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 WITH MITIGATION INCORPORATION. As discussed in the *Agricultural Resources, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, and Transportation/Traffic* sections of this Mitigated Negative Declaration, the project would result in potentially significant temporary impacts as a result of construction that would have the potential to degrade the quality of the environment. However, adoption and implementation of mitigation measures described in this Mitigated Negative Declaration would reduce these individual impacts to less than significant levels.

- b) **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)?**

LESS THAN SIGNIFICANT IMPACT. The geographic context for the analysis of cumulative land use impacts includes the northeastern portion of the City of Riverside and the West Campus Area of UCR, which contains a mix of land uses, including residential,

commercial, industrial, institutional, and agricultural. The analysis accounts for anticipated cumulative growth within this geographic area, as represented by full implementation of the Riverside General Plan 2025 and UCR Long Range Development Plan (LRDP).

It is anticipated that growth within the City of Riverside, including identified West Campus related projects, would result in changes to the existing land use environment through the conversion of vacant/agricultural land, and low density uses to higher density uses, or through conversions of existing land uses (e.g., from residential to commercial). However, it is assumed that future development would be consistent with applicable Riverside General Plan 2025 and zoning requirements or subject to an allowable exception, and further subject to CEQA, mitigation requirements, and design review. It is also assumed that West Campus future development would be consistent with the UCR LRDP. Impacts would be less than significant.

In terms of assessing whether the project's incremental contribution to greenhouse gas emissions is "cumulatively considerable" pursuant to Section 15130 of the *State CEQA Guidelines*, the extremely minor contribution of the project to global greenhouse gas emissions suggests that this project is not. It is beyond the scope of this Environmental Initial Study to determine the greenhouse gas effects of all "past, present, and probable future projects producing related or cumulative impacts;" such an inventory of greenhouse gas emissions is similar to the massive effort currently underway by the California Air Resources Board. Additionally, it is not possible to rely on, "[a] summary of projections contained in an adopted general plan or related planning document," because the applicable adopted local and regional planning documents do not provide the necessary analyses of greenhouse gas emissions. Consequently, while the global significance of climate change is acknowledged, determining the cumulative contribution of the project is speculative, and therefore, is not pursued further in this Environmental Initial Study.

- c) **Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATION. Project impacts include the potential for an accidental release of hazardous materials stored in staging areas and used during the construction of the 69 kV sub-transmission line that could enter nearby waterways, adjacent lands, or public roadways. With implementation of **Mitigation Measures HAZ-1** provided in the *Hazards and Hazardous Materials* section of this document, the project would not result in environmental effects that could cause adverse effects on human beings, either directly or indirectly.

Sources

City of Riverside. November 2007. *Riverside General Plan 2025*.

State CEQA Guidelines Section 15130(b)(1)(A).

University of California, Riverside. November 2005. *UCR 2005 Long Range Development Plan*.

University of California, Riverside. March 2003. *West Campus Area Plan*.

4.0 MITIGATION MEASURES

Agricultural Resources	
AGR-1	Provide construction specifications regarding soil salvage and reuse (preserve and replace topsoil disturbed by project-related activities), vegetation protection, and finished grading
AGR-2	Confine construction operations to specified project work limits. Install temporary barriers to protect natural surroundings (including trees, plants, and root zones) from damage. Repair or replace damaged trees and plants, and avoid fastening ropes, cables, or fences to trees.
Biological Resources	
BIO-1	Limit construction activities that adversely affect native vegetation communities along milepost 3.5 and provide a revegetation plan for temporary impacts, using approved native seed mix.
BIO -2	Project biologist will be responsible for monitoring and documenting compliance with the project's biological resource requirements along milepost 3.5. The biologist will visit the project at least once a week during work along milepost 3.5.
BIO -3	Project biologist will be responsible for monitoring and documenting compliance with the project's environmental resource requirements. The biologist will visit the work site once every two weeks to ensure compliance.
BIO -4	Project biologist will conduct preconstruction surveys for nesting birds from February 15 through August 30 to maintain compliance with the Migratory Bird Act. If nesting birds are discovered within work limits, implement protective measures and prohibit vegetation clearing between February 15 and August 30.
BIO -5	Within thirty days of ground-disturbing construction activities, project biologist will conduct preconstruction surveys along milepost 1.5 through 3.5 for burrowing owl to maintain compliance with MSHCP. Individuals or occupied burrows discovered within 50 meters (approximately 160 feet) of ground-disturbing activities that cannot be avoided will be relocated according to California State Fish and Game protocol.
BIO -6	Within thirty days of ground-disturbing activities or during appropriate blooming periods a qualified botanist will conduct preconstruction surveys within 100 feet of work areas along milepost 3.5 for Nevin's berberry (<i>Berberis nevinii</i>), smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>), and round-leaved filaree (<i>California macrophylla</i>), if suitable habitat is present. If discovered, these plants will be flagged and avoided, if feasible. If avoidance is not feasible, these plants will be salvaged and relocated in adjacent suitable locations along the ROW that will not be affected by construction or maintenance activities.
Cultural Resources	
CUL-1	Should previously unrecorded cultural resources be discovered during construction, construction will be halted until a professional archaeologist has had the opportunity to investigate the resource and assess its significance. Any such resource uncovered during the course of project-related grading or construction shall be recorded and/or removed per standard archaeological practice and/or applicable City and/or state regulations.
CUL-2	Prior to construction a professional paleontologist shall be consulted regarding the sensitivity of the proposed area of approximately 1,700 feet of trenching for containing for vertebrate paleontological resources. If recommended by the paleontologist, on-site monitoring of construction activities will be conducted during excavation of the trench. Should background research or field observation indicate that the ground is already disturbed to a depth greater than 5 feet (the anticipated maximum depth of the trench), the paleontologist may determine that further monitoring is not needed. In the event that

	paleontological findings are discovered during construction, construction will be halted until a professional paleontologist has had the opportunity to investigate the resource and assess its significance.
Hazards and Hazardous Materials	
HAZ-1	RPU's Hazardous Substance Control and Emergency Response Plan shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the Plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of Federal, State and local agencies and primary, secondary, and final cleanup procedures. The Hazardous Substance Control and Emergency Response Plan shall be submitted to RPU prior to the commencement of construction activities.
Transportation and Traffic	
TRA-1	RPU will coordinate all construction activities with the shared railroad ROW with Union Pacific Railroad, Burlington Northern Santa Fe Railway, Metrolink, and Amtrak in order to schedule transmission line stringing activities so that railroad traffic would not be impacted.

5.0 LIST OF PREPARERS

RPU

- Jorge Somoano
- Lyle Hill
- Mike Torelli

POWER

- Mike Strand (Project Manager)
- John Paez (Project Coordinator, Aesthetics, Visual Simulations)
- Mark Schaffer (Hazards and Hazardous Materials, Land Use and Planning, Noise, Population and Housing, Public Services, Transportation and Traffic, Mandatory Findings of Significance)
- Roya Compani-Tabrizi (Agricultural Resources, Mineral Resources, Recreation, Utilities and Service Systems)
- Allison Carver (Biological Resources, Hydrology and Water Quality)
- Jim Rudolph (Cultural Resources)
- Mike Cook (Kleinfelder-Geology and Soils)
- Bob Estes/Tammy Chavez (URS Corporation-Air Quality)
- Charlie Koenig (Visual Simulations)
- Sarah Doering (GIS/Mapping)
- Saadia Byram (Document)