DRAFT
ENVIRONMENTAL IMPACT REPORT

FOR THE

LODI WEST 60 kV POWER LINE PROJECT
City of Lodi, California

July 20, 2010

Prepared for:

CITY OF LODI
Community Development Department
221 West Pine Street
Lodi, CA 95241

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221 West Pine Street
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(209) 333-6800

Prepared by:

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1.0 INTRODUCTION

1.1 PROJECT AND EIR OVERVIEW

The Lodi West 60 kV Power Line Project proposes the construction of a new 60-kilovolt (kV) electrical power line that would increase the reliability of the existing electrical supply to Lodi Electric Utility (LEU) customers. Currently, Lodi has only one connection point to the regional electrical grid. The electrical supply is picked up at a Pacific Gas and Electric (PG&E) substation several miles east of the City of Lodi, within San Joaquin County. The existing power line runs west for several miles through rural farmland before reaching LEU customers. This existing line has experienced several failures in the past years, resulting in loss of power to the entire city. To ensure a more reliable supply of electricity to the City of Lodi, the City proposes to construct an additional power line that will connect Lodi to the regional power grid at a second location on the west side of the City of Lodi. This Environmental Impact Report (EIR) describes the potential environmental effects that would result from the City of Lodi (City) approval of the project and its subsequent development.

The project area is located in a rural area west-southwest of the City of Lodi (Figures 1-1 and 1-2). The project's eastern terminus is located near a proposed future substation at the intersection of State Route 12 and the future Westgate Drive. The project's western terminus is located west of the City of Lodi Water Pollution Control Facility (WPCF) site, which is located adjacent to and west of Interstate 5. The City has proposed a primary proposed route for the project, known as the Primary Route. The Primary Route would place a set of six 60-kV conductors overhead on power poles (both wood and steel) along, from east to west, a private farm road, Harney Lane, DeVries Road, Tredway Road, Neeley Road, Kingdon Road, Thornton Road and City of Lodi property. Steel poles will be used in locations that the line changes direction or where increased height is needed. Once the new line reaches the WPCF site, it would connect to the existing 230 kV switchyard operated by the Northern California Power Agency (NCPA).

The purpose of this EIR is to analyze and describe the potentially significant environmental impacts of the Lodi West 60 kV Power Line Project; to identify, analyze and recommend feasible mitigation measures that would avoid or substantially reduce the project's environmental effects; to analyze reasonable alternatives to the proposed project; and to meet other applicable requirements of the California Environmental Quality Act (CEQA). The EIR is an informational document that does not in itself determine whether the proposed project will be approved; instead, the function of the EIR is to inform the public of the land use planning and decision-making process associated with the project. The authority for EIR preparation and the relationship of the project and this document to applicable legal requirements under CEQA are addressed in Section 1.2 below.

1.2 EIR REQUIREMENTS AND PROCESSING UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

This EIR has been prepared in accordance with the requirements of CEQA and the State CEQA Guidelines. CEQA was passed in 1970 to ensure that state and local agencies consider the environmental effects of actions undertaken, funded or regulated by those agencies. The State CEQA Guidelines contain advisory and mandatory requirements for the application of CEQA to development projects. The City of Lodi is the "lead agency" for the proposed project. As defined in the CEQA Guidelines, the lead agency is the public agency that carries out a project or that has the greatest responsibility for supervising or approving a project.

An EIR is intended to inform decision-makers and the public about the potentially significant adverse environmental effects of the proposed project, and to recommend any feasible mitigation measures that would reduce or avoid these effects. The EIR includes consideration of cumulative impacts, growth-inducing impacts, irreversible effects and alternatives to the proposed project. Regulatory agencies and members of the public have the opportunity to comment on the adequacy of the environmental review during a 45-day review period following the publication of the Public Review Draft EIR. After the close of the public review period, the City is obligated to provide written responses to the comments received, and those responses will be published in a Final EIR. The Final EIR must be considered by City decision-makers, and any other agencies that have approval jurisdiction over the project, prior to project approval. The approving agencies are also required to make certain findings related to the mitigation of significant environmental effects prior to project approval.

This document is the Public Review Draft EIR (Draft EIR) for the Lodi West 60 kV Power Line Project. This EIR is now being made available for review by agencies and the public. The EIR is accompanied by a Notice of Availability and/or a Notice of Completion, which specify the beginning and ending dates of the public review period. Any comments or questions regarding this EIR should be submitted to the lead agency at the following address by the date specified in the Notice of Availability and/or Notice of Completion for this Draft EIR.

City of Lodi
Community Development Department
City Hall, 221 West Pine Street
P.O. Box 3006
Lodi, CA 95241-1910
Attention: Konradt Bartlam, Interim Community Development Director

1.3 RELATED PROJECTS

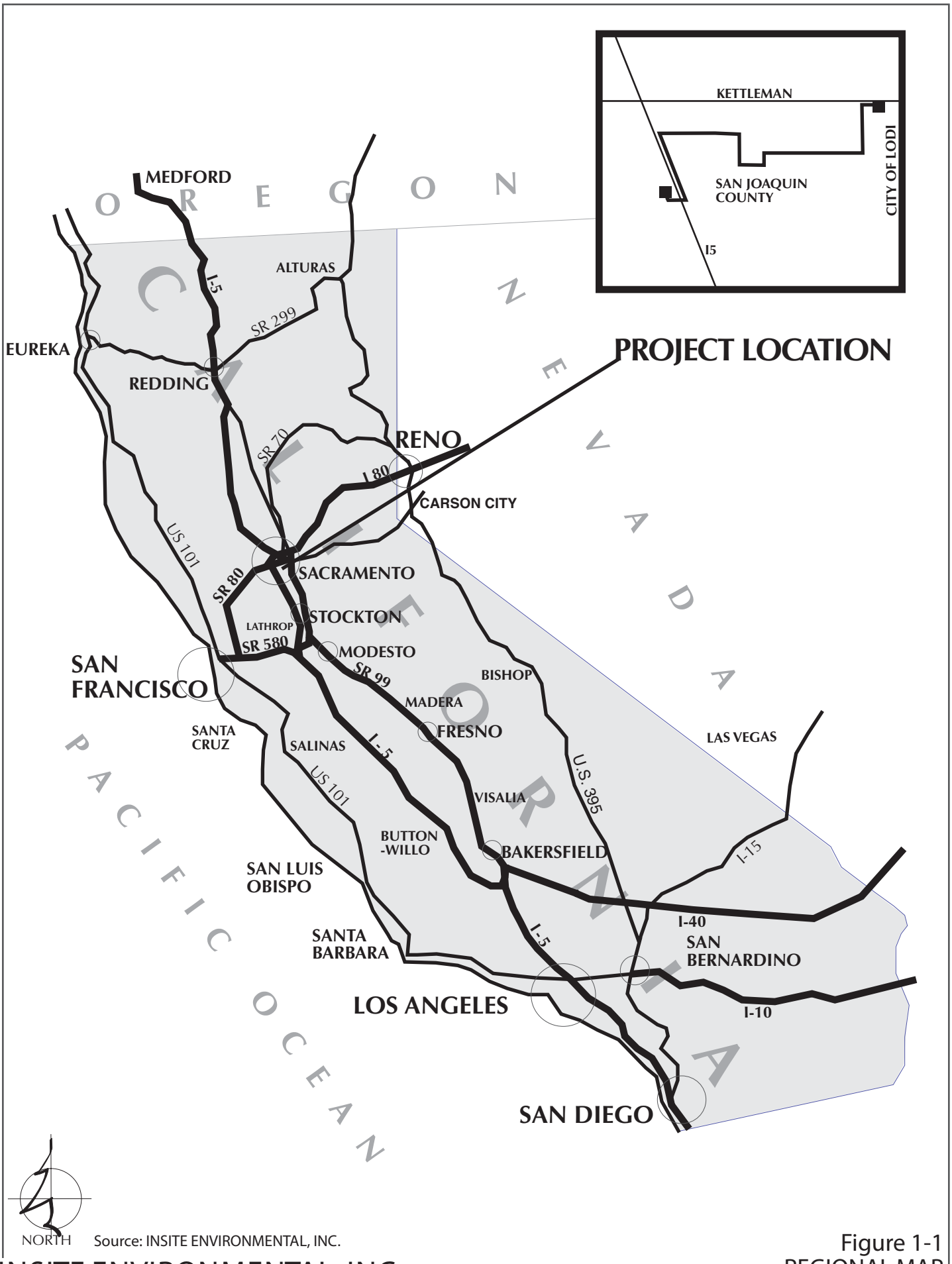
The majority of the proposed Primary Route is located in a rural area located southwest of the City of Lodi; portions of the Primary Route are located within the jurisdiction of San Joaquin County. Agriculture is the predominant land use in this portion of the project area, and development has been limited mainly to scattered residences and agricultural buildings. Public facilities, such as a power plant and wastewater treatment plant are located adjacent to the Primary Route, west of Interstate 5.

The western terminus of the proposed Primary Route is located within the 49-megawatt (MW) power plant operated by the Northern California Power Agency. A substation will be constructed within this facility. NCPA's Combustion Turbine Project No. 2 began commercial operation in April 1995. The facility consists of a 49.9 MW steam-injected gas turbine (STIG) electrical generation power plant.

NCPA has processed and received approval from the California Energy Commission in April 2010 to construct a second power plant, the Lodi Energy Center (LEC). LEC is to be located immediately adjacent to the STIG plant. The two power plants (existing and proposed) are located in a complex that also includes the City of Lodi's White Slough Water Pollution Control Facility (WPCF).

The proposed LEC would generate 225 MW of electricity using steam turbine generators operating on natural gas. The gas would be supplied by a new 2.5-mile pipeline that would be installed next to an existing gas pipeline that supplies the 49-MW plant at the WPCF site.

At the eastern terminus of the proposed Primary Route, Lodi Electrical Utility proposes to construct the future Westside Substation. The substation project would be located on City property next to the proposed extension of Westgate Drive south of State Route 12 (Figures 1-2, 3-1 and 3-2A). Although the Westside Substation would be one of the endpoints of the Lodi West 60 kV Power Line Project, it would be constructed prior to and independently of the 60 kV Power Line Project. For the purposes of this EIR, the Westside Substation is assumed to be in place.



Source: INSITE ENVIRONMENTAL, INC.

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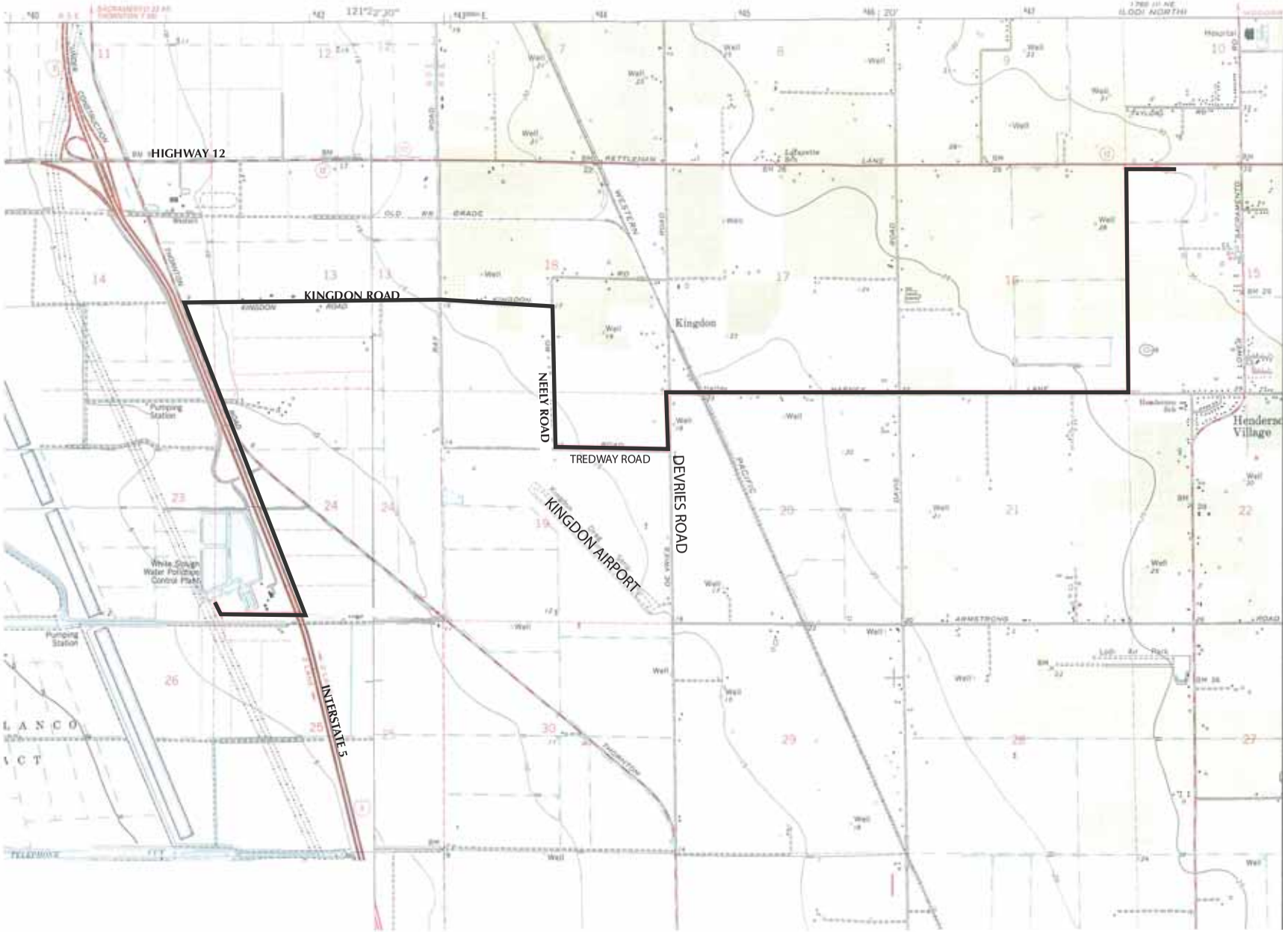
Figure 1-1
REGIONAL MAP



NORTH

Source: USGS TERMINOUS AND LODI SOUTH QUADRANGLE 7.5 MINUTE SERIES

INSITE ENVIRONMENTAL, INC.

Figure 1-2
VICINITY/USGS MAP

2.0 SUMMARY

2.1 SUMMARY OF PROJECT DESCRIPTION

The Lodi West 60 kV Power Line Project proposes the construction of a new 60-kilovolt (kV) electrical power line that would increase the reliability of the existing electrical supply to Lodi Electric Utility (LEU) customers. Currently, Lodi has only one connection point to the regional electrical grid. The electrical supply is picked up at a Pacific Gas and Electric (PG&E) substation several miles east of the City of Lodi, within San Joaquin County. The existing power line runs west for several miles through rural farmland before reaching LEU customers. This existing line has experienced several failures in the past years, resulting in loss of power to the entire city. To ensure a more reliable supply of electricity to the City of Lodi, the City proposes to construct an additional power line that will connect Lodi to the regional power grid at a second location on the west side of the City of Lodi.

The project area is located in a rural area west-southwest of the City of Lodi. The project's eastern terminus is located near a proposed future substation at the intersection of State Route 12 and the future Westgate Drive. The project's western terminus is located west of the City of Lodi Water Pollution Control Facility (WPCF) site, which is located adjacent to and west of Interstate 5, within the Northern California Power Agency (NCPA) 230 kV switchyard.

The City has proposed a primary proposed route for the project, known as the Primary Route. The Primary Route would place a set of six 60-kV conductors overhead on power poles (both wood and steel) along, from east to west, a private farm road, Harney Lane, DeVries Road, Tredway Road, Neeley Road, Kingdon Road, Thornton Road and City of Lodi property. Steel poles will be used in locations that the line changes direction or where increased height is needed. Once the new line reaches the WPCF area, it would connect to the existing 230 kV switchyard operated by the Northern California Power Agency (NCPA).

2.2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

The potentially significant impacts of the proposed project and mitigation measures proposed to minimize these effects are listed in Table 2-1 at the end of this chapter. The table also identifies the level to which the proposed mitigation measures would reduce impacts. Significant unavoidable impacts are those for which the significance remains "significant" or "less than significant" after mitigation measures are applied.

2.3 SUMMARY OF ALTERNATIVES

Chapter 20.0 identifies and discusses a range of reasonable alternatives to the proposed project. The alternatives considered in that chapter include:

- No Project Alternative
- Alternate Route #1
- Alternate Route #2
- Combinations of Primary Route and Alternative Routes
- Alternative Eastern Terminus Tie-in

The No Project Alternative is defined as the continuation of existing conditions in the project area. Under the No Project Alternative, no 60 kV Power Line would be installed between the NCPA power plant site and the future Westside Substation site. No new power poles would be installed, and existing power lines would remain in place, subject to occasional repair or replacement as conditions warrant. The City of Lodi would continue to rely on its existing connection to the regional power grid at the substation east of Lodi. The No Project Alternative would not fulfill the objective of the proposed project, which is to increase the reliability of the City's electric system. The electric system would remain vulnerable to potential failures, which may continue to cause citywide blackouts.

The Alternative Route #1 Alternative would be similar to the proposed project, in that it would begin at the proposed Westside Substation and end at the NCPA power plant site. However, the route alignment would be different than the Primary Route by utilizing State Route 12, Davis Road, and remain on Tredway Road to Ray Road and then enter agricultural property between Ray Road and Interstate 5. The Alternative Route #2 Alternative would be similar to Alternative Route 1, but the alignment through the agricultural property, between Ray Road and Interstate 5, would slightly differ.

Many of the impacts of Alternate Routes #1 and #2 would be similar to those of the proposed project. These routes would avoid some of the rural residences along Harney Lane, Neeley Road, Kingdon Road and Thornton Road that would be affected by the proposed project, thereby avoiding the potentially adverse air quality and noise impacts on these residences from construction activities. However, these impacts would only be transferred to residences and businesses along SR 12 and Davis Road. Construction on the segments south, southwest of Ray Road may lead to greater dust emissions, as construction would occur on mostly undeveloped land and increase potential impacts to agricultural production due to construction activities.

These alternative routes along Tredway Road would cross over safety zones designated for Kingdon Airpark by the County's Airport Land Use Compatibility Plan (see Chapter 11.0, Health and Safety). In particular, the alignment passes through the Runway Protection Zone (Zone 1), the Inner Approach/Departure Zone (Zone 2), and the Inner Turning Zone (Zone 3). Any poles set in Zone 1 would require Airport Land Use Commission (ALUC) review, while poles in Zone 2 would likely require review, as most poles would be taller than 35 feet. Depending on the results of the ALUC review, pole sizes may need to be shortened, or poles may not be allowed in the zones. This may affect the feasibility of these Alternative Routes.

The Combinations of Primary Route and Alternative Routes Alternative would be similar to the proposed project, in that it would begin at the proposed eastern terminus and end at the NCPA power plant site. However, the alignment would be a combination of the Primary Route and the Alternate Routes. Essentially, this alternative would utilize Alternate Routes #1 and #2 segments along SR 12 and Davis Road and then follow the remaining segments of the Primary Route to the

western terminus at the NCPA power plant. This alternative would fulfill the proposed project objective while avoiding potential conflicts with the Kingdon Airport compatibility zones along Tredway Road and Ray Road that the Alternate Routes encounter. However, it would have aesthetic impacts along SR 12, as well as potential agricultural conflicts due to the placement of the poles. Long range planning improvements along SR 12, including widening of the roadway, could lead to a need to acquire easements from adjacent property owners to implement this alternative, which would add more expense to the project and possibly result in the loss of agricultural land.

The Alternate Eastern Terminus Tie-in Alternative would entail by-passing the future Westside Substation site and connecting the 60 kV Power Line into existing 60 kV power lines closer to Lower Sacramento Road. Approximately six poles would be required to extend this alternative from Westgate Drive to Lower Sacramento Road. This alternative would have many of the same potential impacts identified under the proposed project, however, it would have additional aesthetic impacts along SR 12 due to the placement of the additional poles.

2.4 SIGNIFICANT UNAVOIDABLE IMPACTS

This EIR identifies the significant environmental effects of the proposed project and the mitigation measures that are proposed to minimize these effects. Proposed mitigation would be effective in reducing project-level potentially significant environmental effects to a less than significant level in all cases. However, the project's potential impacts on cumulative aesthetic impacts would not be reduced to less than considerable thus these cumulative aesthetic impacts are considered significant and unavoidable.

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures		Mitigation Measures	Significance After Mitigation
4.0 AESTHETICS				
Project Effects on Visual Resources	LS		None required.	
Aesthetic Effects on Scenic Routes and Scenic Vistas	LS		None required.	
Aesthetic Effects of Construction	LS		None required.	
Light and Glare	LS		None required.	
5.0 AGRICULTURE				
Loss of Farmland	LS		None required.	
Williamson Act Lands Impacted	LS		None required.	
Conversion of Farmlands	LS		None required.	
6.0 AIR:				
Impacts of Project Construction on Air Quality	PS	6-1.	All project construction activities shall comply with relevant provisions of the San Joaquin Valley Air Pollution Control District Regulation VIII - Control Measures for Construction Emissions of PM-10, as described in Table 6-2 of the District's Guide for Assessing Air Quality Impacts, or the applicable regulation of the APCD with jurisdiction. These requirements would typically include: a. All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or vegetative ground cover. b. All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. c. All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. d. When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained. e. All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust	LS

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures		Mitigation Measures	Significance After Mitigation
			emissions. Use of blower devices is expressly forbidden. f. Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. g. Limit traffic speeds on unpaved roads to 15 mph.	
Impacts of Project Operations on Air Quality	LS		None required.	
Exposure to Toxic Air Contaminants	LS		None required	
Exposures to Odors	LS		None required.	
7.0 BIOLOGICAL RESOURCES				
Impacts on Special Status Plants	LS		None required.	
Impacts to Special Status Wildlife Species	PS	7-1.	Pre-construction surveys for nesting Swainson's hawks along the Primary Route shall be conducted if construction commences between March 1 and September 15. The surveys shall include all large trees visible from the Primary Route. If active nests are found, a qualified biologist shall recommend any necessary temporal restrictions on construction to avoid or minimize disturbance of the nests. Such restrictions may include, but are not limited to, a buffer area around nests within which no construction activities would occur until the young have fledged.	LS
		7-2	Pre-construction surveys for burrowing owls along the Primary Route shall be conducted if construction commences between February 1 and August 31. The surveys shall include the rural areas along the roads that the Primary Route follows, and all areas of open grassland visible from the Primary Route. If occupied burrows are found, a qualified biologist shall recommend any necessary temporal restrictions on construction to avoid or minimize disturbance of the nests. Such restrictions may include, but are not limited to, a buffer area around nests within which no construction activities would occur until the young have fledged.	
		7-3	Pre-construction surveys for tricolored blackbird shall be conducted if construction commences between March 15 and August 1. The survey shall include the blackberry brambles and marsh vegetation associated with wetlands in the vicinity of the west end of the Primary Route. If active nests are found, a qualified biologist shall recommend any necessary temporal restrictions on construction to avoid or minimize disturbance of	

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures		Mitigation Measures	Significance After Mitigation
			the nests. Such restrictions may include, but are not limited to, a buffer area around nests within which no construction activities would occur until the young have fledged.	
		7-4	Any trees that need to be removed or trimmed as part of the project shall be felled or trimmed outside of the general bird nesting season (February 1 through August 31), or a nesting bird survey shall be conducted immediately prior to the proposed tree removal or trimming. If active nests are found, tree felling or trimming shall be delayed until the young have fledged.	
		7-5	As an alternative to the above mitigation measures, the proponent may seek coverage under the SJMSCP. In this event, the proponent shall request coverage under the SJMSCP, pay required fees and observe any Incidental Take Minimization Measures specified for the project by the San Joaquin County COG.	
Impacts on Wetlands and Waters of the US	PS	7-6	Potentially jurisdictional waters of the U.S. and wetlands shall be avoided to the maximum extent practicable through placing the power poles outside the potentially jurisdictional areas. If power poles must be placed within potentially jurisdictional waters of the U.S. or wetlands and/or modifications to the jurisdiction areas are needed to support the pole installation, a wetland delineation shall be conducted and submitted to ACOE to determine the jurisdictional or non-jurisdictional status of mapped features. If the project will involve encroachment into potentially jurisdictional waters of the U.S. and wetlands, all necessary permits and/or certification shall be obtained from ACOE, CDFG, and the Regional Water Quality Control Board, and the project shall comply with all conditions of these permits and/or certifications.	LS
Other Biological Resource Impacts	LS		None required.	
8.0 CULTURAL RESOURCES				
Potential Impacts on Prehistoric Cultural Resources	PS	8-1	If any subsurface cultural resources, including either prehistoric or historic resources, are encountered during construction, all construction activities in the vicinity of the encounter shall be halted until a qualified archaeologist can examine these materials and make a determination of their significance.	LS
		8-2	If human remains are encountered at any time during the development of the project, all work in the vicinity of the find shall halt and the County Coroner shall be notified immediately. If it is determined that the remains are those of a Native American, the Coroner must contact the Native American Heritage Commission. At the same time, a qualified archaeologist must be contacted to evaluate the archaeological implications of the finds. The CEQA Guidelines detail steps to be taken when human remains are found to be of Native American origin.	

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures		Mitigation Measures	Significance After Mitigation
Potential Project Effects on Historic Resources	PS	8-3	The EUD shall be responsible for compliance with Mitigation Measure 8-1, if necessary, regarding unidentified subsurface cultural resources exposed during excavation activities, including unidentified historic resource.	LS
9.0 GEOLOGY AND SOILS				
Project Exposure to Faulting and Seismic Shaking Hazards	LS		None required.	
Project Exposure to Liquefaction	LS		None required.	
Exposure of Project to Soil Hazards	LS		None required.	
Effects on Mineral Resources	LS		None required.	
10.0 GLOBAL CLIMATE CHANGE				
Impacts of Project-Related Greenhouse Gas Emissions	LS		None required.	
Project Consistency with Applicable Plans	LS		None required.	
Impacts of Climate Change on Project	LS		None required.	
11.0 HEALTH AND SAFETY				
Impacts from Hazardous Materials during Construction	LS		None required.	
Hazardous Material Impacts During Project Operation and Maintenance	LS		None required.	
Transport of Hazardous Materials	LS		None required.	
Impact of High-Voltage Power Lines	LS		None required.	
Hazards Related to Airport Operations	PS	11-1	If design modifications require power pole heights to exceed 100 feet above ground level along the Primary Route, the Airport Land Use Commission and Federal Aviation Administration shall be notified and a request made to review the land use action (e.g., installation of power poles that exceed 100 feet in height within Compatibility Zones 7 and 8).	LS

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures		Mitigation Measures	Significance After Mitigation
Electrocution Hazards	LS		None required.	
12.0 HYDROLOGY AND WATER QUALITY				
Impacts on Surface Water Supply and Quality	LS		None required.	
Impacts on Groundwater Supply and Quality	LS		None required.	
Project Effects on Stormwater Runoff	LS		None required.	
Exposure of Primary Route to Flooding Hazards	LS		None required.	
13.0 LAND USE AND PLANNING				
Issues Associated with Existing Land Uses	LS		None required.	
Consistency with General Plan Policies	LS		None required.	
Consistency with Zoning	LS		None required.	
Consistency with San Joaquin County Habitat Conservation Plan	LS		None required.	
Consistency with the Airport Land Use Compatibility Plan	LS		None required.	
14.0 NOISE				
Construction Noise	PS	14-1.	Temporary noise impacts resulting from project construction shall be minimized by restricting hours of operation by noise-generating equipment to 7:00 AM to 7:00 PM Monday through Saturday when such equipment is to be used near noise-sensitive land uses. No construction activities shall occur Sundays or national holidays.	LS
		14-2	All construction equipment shall be fitted with factory equipped mufflers, and shall be maintained in good working order, at all times.	
Impacts of Project Operations	LS		None required.	
Airport Noise	LS		None required.	

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation
15.0 POPULATION AND HOUSING			
Project Effects on Population Growth	LS	None required.	
Project Effects on Housing	LS	None required.	
16.0 PUBLIC SERVICES/FACILITIES			
Project Impacts on Public Services	LS	None required.	
17.0 TRANSPORTATION			
Impacts on Roadway and Intersection Operations	LS	None required.	
Impacts on Railroad and Public Transit Operations	LS	None required.	
Impacts on Pedestrian and Bicycle Facilities	LS	None required.	
Impacts on Air Traffic	LS	None required.	
18.0 UTILITIES/SERVICES SYSTEMS			
Water and Wastewater Systems	LS	None required.	
Storm Drainage Systems	LS	None required.	
Solid Waste Generation	LS	None required.	
Project Impacts on Non-Electrical Utilities	LS	None required.	
Project Impacts on Electrical System	LS	None required.	
Project Effects on Energy Consumption	LS	None required.	
19.0 CUMULATIVE			
Aesthetics	CS	None available.	CS
Agricultural Resources	LC	None required.	
Air Quality	LC	None required.	

TABLE 2-1

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Potential Impact	Significance Before Mitigation Measures	Mitigation Measures	Significance After Mitigation
Biological Resources	LC	None required.	
Cultural Resources	LC	None required.	
Geology and Soils	LC	None required.	
Global Climate Change	LC	None required.	
Health and Safety	LC	None required.	
Hydrology and Water Quality	LC	None required.	
Land Use and Planning	LC	None required.	
Noise	LC	None required.	
Public Services	LC	None required.	
Transportation/Circulation	LC	None required.	
Utilities and Energy Systems	LC	None required.	

Mitigation Measure Key Code:

ODS=Owners, developers and/or successors-in-interest; S=Significant; CS=Cumulatively Considerable and Significant; PS=Potentially Significant; LS=Less than Significant; LC=Less than Considerable

3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The Lodi West 60 kV Power Line Project proposes the construction of a new 60 kilovolt (kV) electrical power line. The purpose of the project is to increase the reliability of the existing electrical supply to Lodi Electric Utility (LEU) customers. Currently, Lodi has only one connection point to the regional electrical grid. The electrical supply is picked up at a Pacific Gas and Electric (PG&E) substation several miles east of the City of Lodi, within San Joaquin County. The power line runs west for several miles through rural farmland before reaching LEU customers. This existing line has experienced several failures in the past years, resulting in loss of power to the entire city. To ensure a more reliable supply of electricity to the City of Lodi, the City proposes to construct an additional 7.8-mile long power line that will connect Lodi to the regional power grid at a second location west of the City of Lodi.

The proposed Primary Route, which is linear in nature, involves construction and operation of a planned 7.8-mile long 60 kV power line by the City of Lodi Electrical Utility Department (EUD). The line would connect the City's future Westside Substation, located near the intersection of State Route 12 and the future Westgate Drive, with available electric supply from major statewide distribution lines that parallel the west side of I-5, south of State Route 12. This tie-in will occur at the existing Northern California Power Agency's 230 kV switchyard facility near the City of Lodi's White Slough Water Pollution Control Plant west of I-5.

The Primary Route between the two end points will traverse rural agricultural areas within San Joaquin County. A major portion of the Primary Route will be located within existing Public Utility Easements on San Joaquin County roads. One segment near the eastern terminus will be placed along a private farm road within an existing utility easement. A segment along I-5 within City of Lodi property will have to have a utility easement established. A combination of wood and steel poles will be used to carry the proposed power line which consists of 6 wires. Where existing poles with communication lines or PG&E distribution lines are present along the Primary Route; they will be replaced with the new 60 kV poles and the existing lines will be moved onto the new poles.

3.2 PROJECT LOCATION

The proposed 7.8-mile long Primary Route will connect to the future Westside Substation site, located on the southwest corner of Kettleman Lane (also known as State Route 12) and future Westgate Drive, in the City of Lodi. The Primary Route traverses west across unincorporated territory to the site of a proposed substation within the Northern California

Power Agency's power plant facility near the City of Lodi's White Slough Water Pollution Control Plant. Except for privately held land near the Primary Route's eastern terminus and paralleling the east side of I-5, the project would be located within the following road rights-of-ways: Harney Lane, DeVries Road, Tredway Road, Neeley Road, Kingdon Road, and Thornton Road. Refer to Figures 1-1 and 1-2.

3.3 PROJECT OBJECTIVE

The objective of the project is to increase the reliability of the City's electrical system by providing a second point of supply from the regional power grid. The City's system is presently served with power supply from a single PG&E substation located in an unincorporated area to the east of the city. This line has experienced several interruptions in the past years, which have resulted in the loss of power to the entire city. An additional power line as proposed will connect the City of Lodi to the regional power grid at a second location, providing an alternate electric supply in case of an accidental interruption of supply from the eastern power line.

3.4 PROJECT DETAILS

The proposed Primary Route involves construction and operation of a planned 7.8-mile long 60 kilovolt power line by the City of Lodi Electrical Utility Department. The line would connect the City's future Westside Substation with electric supply from regional distribution lines that parallel the west side of I-5, south of State Route 12. This tie-in will occur within the existing Northern California Power Agency's 230 kV switchyard.

The majority of the proposed power line will be constructed with wooden poles (approximately 127). Approximately 13 steel poles will be used at main angle points (approximately 90 degrees) and at critical crossing locations such as roadways and/or drainage ways. Some sections of line will be constructed jointly with existing PG&E distribution lines. All PG&E poles will be replaced and existing facilities transferred to the new poles. The City's preliminary estimate indicates that along the primary route 104 of the proposed poles will be joint (include attaching existing PG&E lines) along the Primary Route, and 36 poles will only have an EUD solo attachment (the 60 kV power line only).

The determination of the height of the poles is based on California Public Utilities Commission General Order 95 (GO-95) construction standards for a 60 kV power line. The steel poles and wooden poles will be a minimum of 57 feet above ground level. Heights up to approximately 90 feet will be required for crossing of existing PG&E power lines, the Union Pacific Railroad tracks, and I-5.

Primary Route Description by Segment

The following is a detailed description of each segment of the Primary Route. Each straight, linear run of line corresponds to a segment. A descriptive title has also been given each segment. Unless steel pole locations are specifically identified in the detailed description or shown on the figures, all other poles should be assumed to be wooden. Figures 3-1 through 3-3 illustrate the Primary Route details, including pole profiles.

Segment A (Future Westside Substation)

- The power line begins at the easternmost interconnection point, the future Westside Substation, located on the southwest corner of Kettleman Lane (State Route 12) and the future Westgate Drive. The 60 kV power line exits the proposed Westside Substation at the southwest corner of the substation and proceeds west approximately 900 feet on the north side of a planned future street right-of-way to a private farm road.

- The first pole next to the future Westside Substation will be steel.

Segment B (Farm Road)

- The power line turns south, with the use of a steel pole, on the private farm road and continues approximately 4,800 feet to Harney Lane. The first approximately 900 feet of the line will be constructed jointly with PG&E distribution lines. After approximately 900 feet, the power line will consist of a solo attachment (the 60 kV power line only). A steel pole is used at this transition from joint to solo attachment.

- The last 1,200 feet of this segment, north of Harney Lane will be constructed jointly with PG&E distribution lines.

- This north-south trending segment ends with a steel pole within the Harney Lane right-of-way.

Segment C (Harney)

- The power line turns west along the north side of Harney Lane and continues approximately 12,000 feet to DeVries Road. This segment of power line will be constructed jointly with PG&E distribution lines and existing communication lines (i.e., telephone). The last 1,000 feet of power poles before DeVries Road will be joint use with PG&E distribution lines only (no communication).

- This east-west trending segment ends with a steel pole at the northeast corner of DeVries Road and Harney Lane.

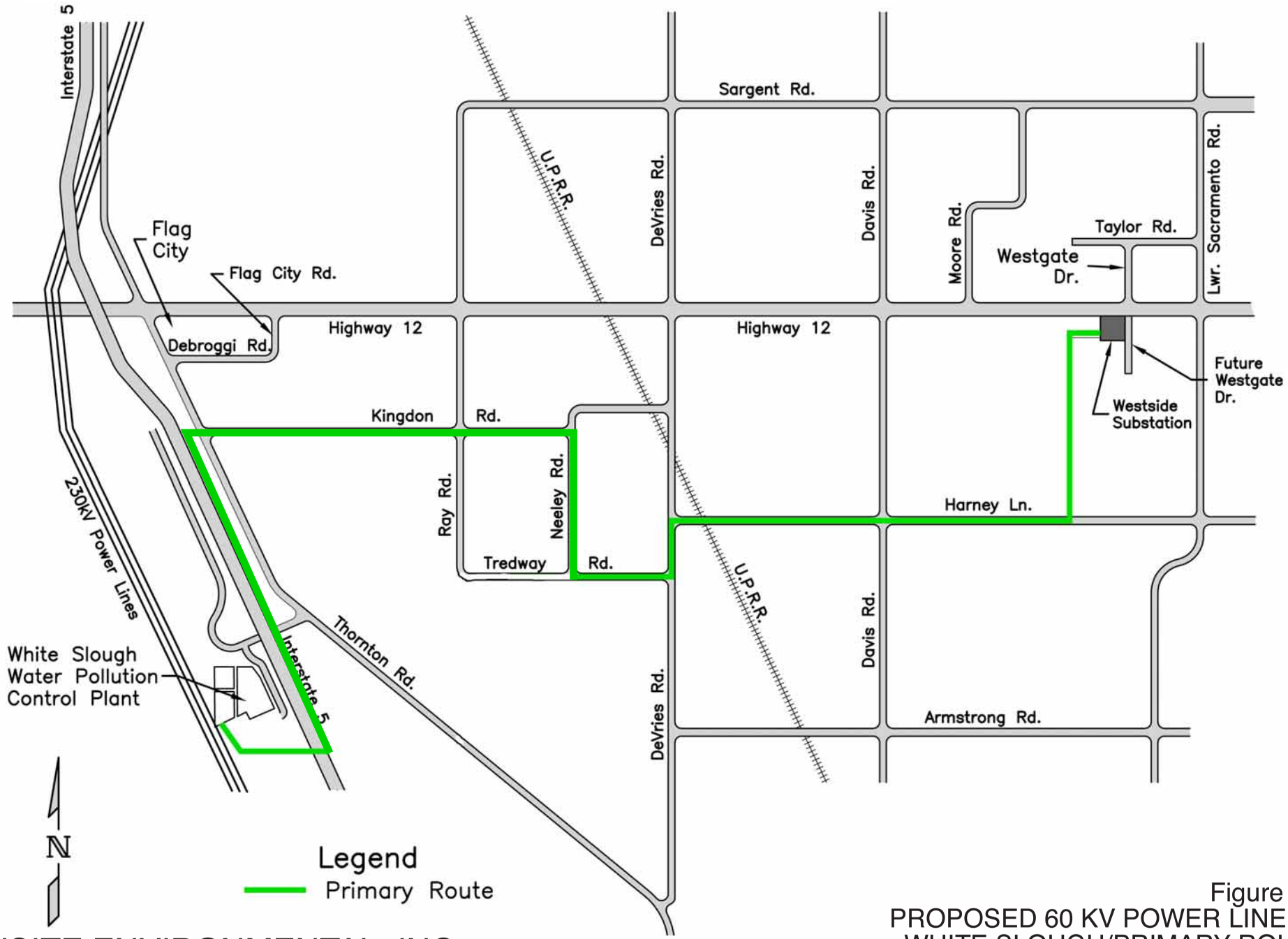
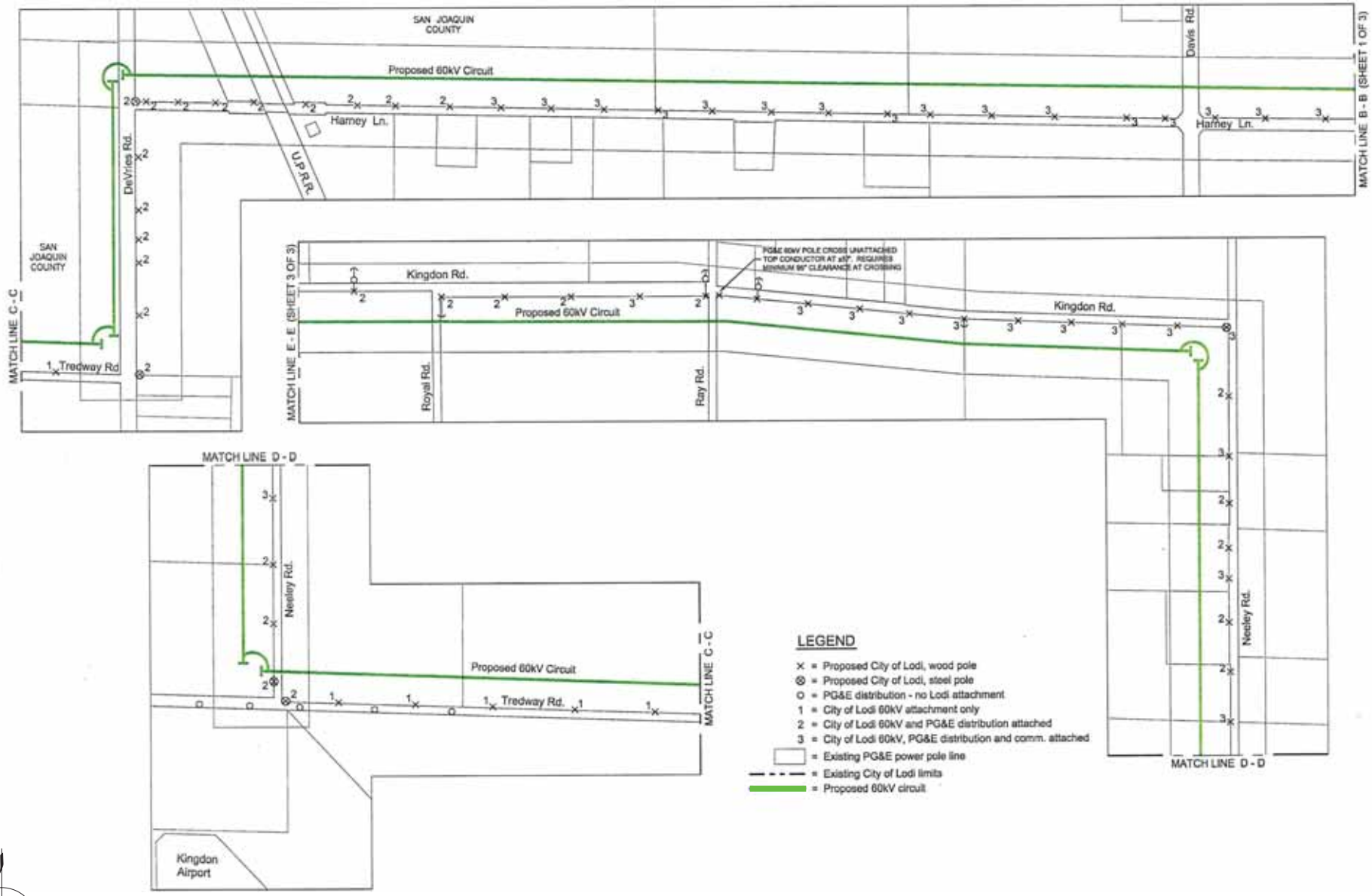


Figure 3-1
PROPOSED 60 KV POWER LINE TO WHITE SLOUGH/PRIMARY ROUTE

NORTH Source: CITY OF LODI

INSITE ENVIRONMENTAL, INC.

Figure 3-2A
PROPOSED 60 kV POWER LINE TO WHITE SLOUGH
SEGMENTS A TO C OF PRIMARY ROUTE

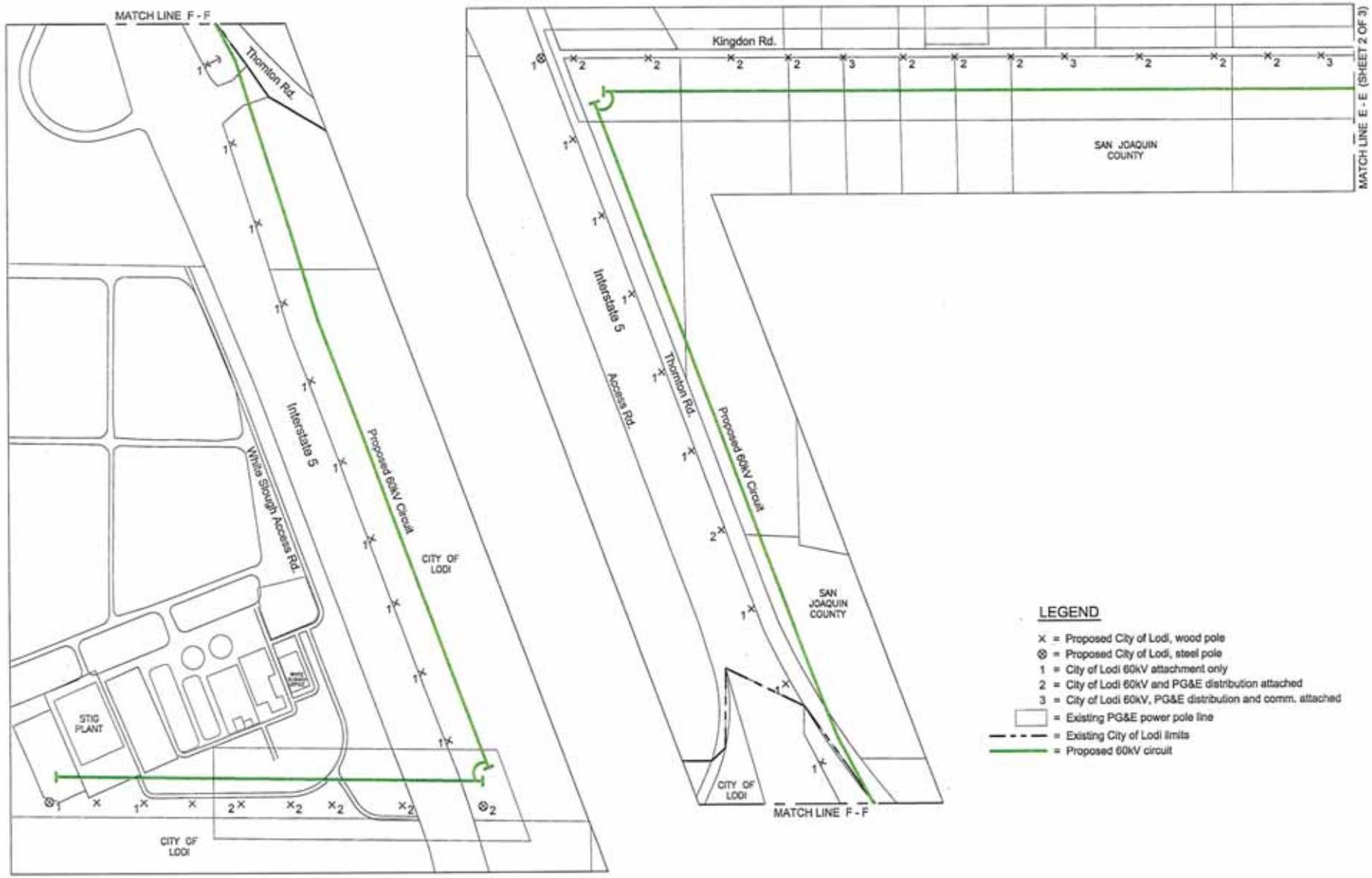


NORTH

Source: CITY OF LODI

INSITE ENVIRONMENTAL, INC.

Figure 3-2B
PROPOSED 60 kV POWER LINE TO WHITE SLOUGH
SEGMENTS C TO G OF PRIMARY ROUTE

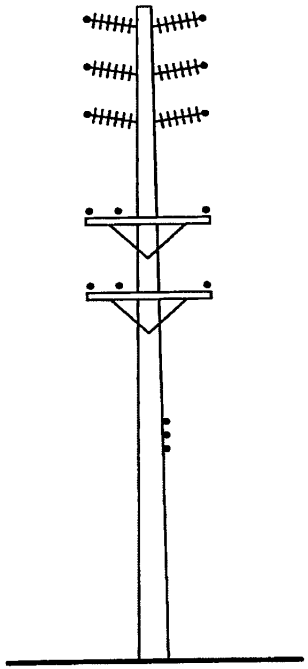


NORTH

Source: CITY OF LODI

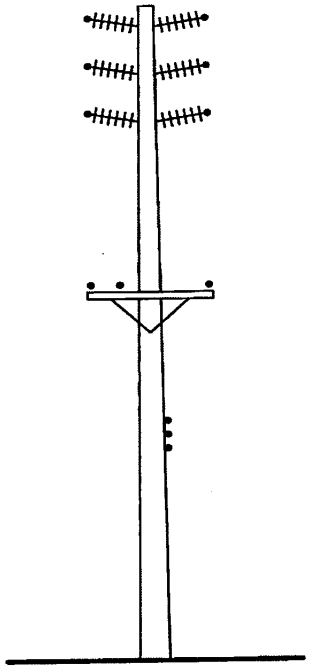
INSITE ENVIRONMENTAL, INC.

Figure 3-2C
PROPOSED 60 kV POWER LINE TO WHITE SLOUGH
SEGMENTS G TO I OF PRIMARY ROUTE



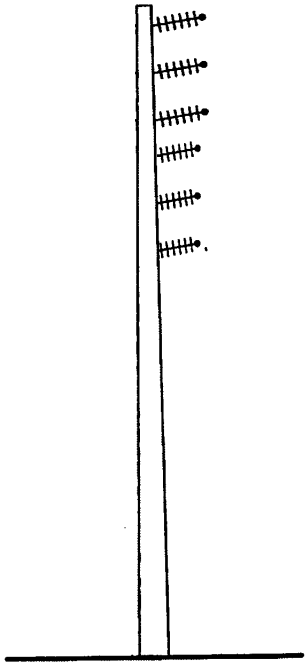
POLE PROFILE

Joint use with dual distribution and communication lines



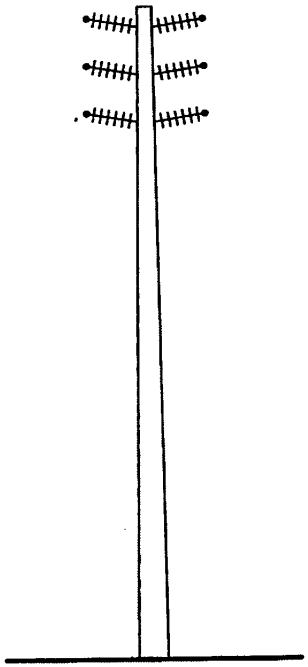
POLE PROFILE

Joint use with distribution and communication lines



POLE PROFILE

Solo Attachment (EUD Only)



POLE PROFILE

Solo Attachment (EUD Only)

SOURCE: CITY OF LODI

INSITE ENVIRONMENTAL, INC.

Figure 3-3
POLE PROFILE

Segment D (DeVries)

- The power line turns south on the east side of DeVries Road for approximately 1,300 feet to Tredway Road. This segment of power line will be constructed jointly with PG&E distribution lines.

- This north-south trending segment ends with a steel pole at the northeast corner of DeVries Road and Tredway Road.

Segment E (Tredway)

- The power line heads west on the north side of Tredway Road for approximately 2,800 feet to Neeley Rd. The power line will leave the joint poles at DeVries Road and consist of a solo attachment (the 60 kV line only) along this segment.

- This east-west trending segment ends with a joint steel pole at the northeast corner of Neeley Road and Tredway Road.

Segment F (Neeley)

- The power line crosses Neeley, travels along the west side of Neeley Road for approximately 3,100 feet. A steel pole is located at the northwest corner of Neeley Road and Tredway Road.

- This segment of power line will be constructed jointly with PG&E distribution and communication lines.

- This segment ends with a joint steel pole at the southwest corner of Kingdon Road and Neeley Road.

Segment G (Kingdon)

- The power line turns west along the south side of Kingdon Road for approximately 8,200 feet to the west side of Thornton Road.

- This segment of power line will be constructed jointly with PG&E distribution and communication lines.

- This segment ends with a steel pole at the southwest corner of Kingdon Road and Thornton Road.

Segment H (Thornton and I-5)

- The power line turns south along the west side of Thornton Road for approximately 4,000 feet, at which point Thornton Road turns to the east. The proposed 60 kV power line continues south, paralleling I-5 for another 4,000 feet along private property adjacent to the I-5 right-of-way.

- This segment of power line consists of a solo attachment (the 60 kV power line only).

Segment I (White Slough)

- The power line crosses I-5 in the same location as an existing PG&E 12kV distribution line crossing. This segment of power line will be constructed jointly with PG&E distribution lines.

- The power line continues west on City of Lodi property for approximately 1,300 feet to a proposed tie-in at the Northern California Power Agency's (NCPA) facility near White Slough Water Pollution Control Plant. The power line will leave the westernmost steel pole along the Primary Route, attach to a takeoff steel structure positioned in the southwest corner of the NCPA facility, and then tie into the existing system.

- Steel poles will be used at both ends of this segment.

White Slough Substation

The western terminus of the Primary Route would be at the existing NCPA power plant, adjacent to the White Slough Water Pollution Control Plant. A modification to the existing power plant substation would be required for an interconnection with the proposed power line. A new substation bay and buss extension would be required to accommodate the installation of the 230/60 kV transformer bank and breakers necessary for the interconnection. A takeoff steel structure will be positioned in the southwest corner of the NCPA facility to receive the power line from the most western steel pole along the Primary Route.

Construction Methods

Most of the proposed power line will be constructed with approximately 127 wooden poles. Approximately 13 steel poles will be used at main angles (approximately 90 degrees) and at critical crossing locations such as roadways and/or drainage ways. Figure 3-3 contains representative schematic drawings of the types of pole design to be utilized. The determination of the height of the poles is based on CPUC GO-95 construction standards for a 60 kV power line.

Some segments of the power line will be constructed jointly with PG&E distribution lines. All PG&E poles will be replaced and facilities transferred to new poles.

Construction of the power line would consist of drilling the holes for the poles, setting the poles, installing associated cross-arms and other hardware, and pulling the conductors into place. Typically, the holes would be drilled and the poles placed with a line truck. A three-man crew can place approximately five poles per day. Typically, once the poles are in place, a rope is strung along the alignment and over the pole fixtures. The rope is tightened and connected to the spooled conductor, and then is used to pull the conductor

into place. Usually a 4,400-foot reel of conductor is pulled at once, although more or less may be pulled depending on the constraints of the site.

Construction of steel corner poles for power lines would involve either the excavation and pouring of a concrete foundation and placement of anchor bolts to which the flanged corner poles would be fastened, or the steel poles would be installed similar to wood poles; holes would be drilled and a portion of the steel pole lowered into the hole.

Construction of the power line would involve temporary work and minor disturbances along existing roads and streets. Conflicts with travel lanes will be minimized at all times, and if any lanes are closed, closure of more than one lane at a time would be unlikely. Traffic safety cones or construction signage would be used to alert drivers to the presence of workers and equipment.

Public Utility Easements/Pole Placement

The Lodi EUD has standards for public utility easements for 60 kV power lines mounted on power poles. For one or both sides of the roadway, the easement would be 10 feet wide from the roadway right-of-way or the property line. This easement is vertical as well as horizontal. At 23 feet above the ground surface, the easement widens to 16.5 feet from the roadway right-of-way or property line. These standards would apply to all segments of the Primary Route.

The project proposes to use the existing easements in which existing power poles have been placed. The EUD presented the proposed project with the Primary Route to the San Joaquin County Planning Department and Public Works Department for their review and comments. The setback for existing utility poles on the Primary Route is 3 to 8 feet. The County agreed to allow the EUD to apply for placing the poles in the existing setbacks from the edge of the roadway (Auriga Corporation, 2008).

Westside Substation (Not A Part)

At the eastern terminus of the Primary Route, the Lodi EUD, as a separate project, will construct a substation at the intersection of State Route 12 and the future Westside Drive. This proposed Westside Substation would be constructed independently of this project, and is being subject to separate CEQA review. The potential environmental effects of the Westside Substation are, however, considered in the cumulative impact analysis in Chapter 19.0, *Cumulative Impacts*.

3.5 PERMITS AND APPROVALS

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) identify the principal discretionary actions under consideration in the EIR as well as any other agency permits and approvals that may require consideration under

CEQA. Anticipated and potential permits and approvals associated with the project are identified in Table 3-1.

TABLE 3-1
PERMITS AND APPROVALS

Agency	Permit/Approval
Federal Aviation Administration (FAA)	Application for Construction of a Permanent Structure
California Department of Transportation	Encroachment Permit
San Joaquin County	Encroachment Permit
Lodi City Council	Final Environmental Impact Report Certification
Union Pacific Railroad	Encroachment Permit