Office of Planning and Environmental Review
Leighann Moffitt, Director

County Executive
Navdeep S. Gill

Mitigated Negative Declaration

Pursuant to Title 14, Division 6, Chapter 3, Article 6, Sections 15070 and 15071 of the California Code of Regulations and pursuant to the Procedures for Preparation and Processing of Environmental Documents adopted by the County of Sacramento pursuant to Sacramento County Ordinance No. SCC-116, the Environmental Coordinator of Sacramento County, State of California, does prepare, make, declare, publish, and cause to be filed with the County Clerk of Sacramento County, State of California, this Negative Declaration re: The Project described as follows:

1. **Control Number: PLER2019-00052**

2. **Title and Short Description of Project:** Linda Manor Septic to Sewer Conversion Project
The project would abandon failing private septic systems and connect 57 single-family residences to public sewer facilities. The project includes approximately 4,800 feet of new 8-inch gravity sewer collector to be constructed within county right-of-way along Elkhorn Boulevard, West 2nd Street, Chisum Avenue, Willis Avenue, and Magdelina Street. The proposed alignment would also require an easement along the southern boundary line of a property located at 6133 West 2nd Street to direct flows from the Linda Manor community towards West 2nd Street. Sewer flows from the community would be conveyed north to Sacramento Regional County Sanitation District's (Regional Sanitation) 66-inch sewer interceptor located beneath West Elkhorn Boulevard, which would then direct flows to Regional Sanitation's Sacramento Regional Wastewater Treatment Plant (SRTWP).
Vertical area of potential effect (APE) for ranges from 5 – 32 feet in depth. The proposed gravity sewer line will be located at a depth of 5 – 7 feet throughout the project area except at the connection point to the Regional Sanitation interceptor located beneath W. Elkhorn Boulevard. Excavation at the interceptor is estimated to be 32 feet deep in order to establish a connection and would likely be accessed via a manhole.

3. **Assessor's Parcel Number:** Various

4. **Location of Project:** The proposed project is located along county right-of-way along Elkhorn Boulevard, West 2nd Street, Chisum Avenue, Willis Avenue, and Magdelina Street in the Linda Manor residential subdivision southwest of the community of Rio Linda in unincorporated Sacramento County.

5. **Project Applicant:** Sacramento Area Sewer District (SASD)

6. Said project will not have a significant effect on the environment for the following reasons:
a. It will not 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.
b. It will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.
c. It will not have impacts, which are individually limited, but cumulatively considerable.
d. It will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

7. As a result thereof, the preparation of an environmental impact report pursuant to the Environmental Quality Act (Division 13 of the Public Resources Code of the State of California) is not required.

8. The attached Initial Study has been prepared by the Sacramento County Office of Planning and Environmental Review in support of this Negative Declaration. Further information may be obtained by contacting the Office of Planning and Environmental Review at 827 Seventh Street, Room 225, Sacramento, California, 95814, or phone (916) 874-6141.

[Original Signature on File]
Tim Hawkins
Environmental Coordinator
County of Sacramento, State of California

COUNTY OF SACRAMENTO
OFFICE OF PLANNING AND ENVIRONMENTAL REVIEW
INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: PLER2019-00052

NAME: Linda Manor Septic to Sewer Conversion Project

LOCATION: The proposed project is located along county right-of-way along Elkhorn Boulevard, West 2nd Street, Chisum Avenue, Willis Avenue, and Magdelina Street in the Linda Manor residential subdivision southwest of the community of Rio Linda in unincorporated Sacramento County.

ASSESSOR'S PARCEL NUMBER: Various

OWNERS: Sacramento County & Various Private Land Owners

APPLICANT: Sacramento Area Sewer District (SASD)

PROJECT DESCRIPTION

The project would abandon failing private septic systems and connect 57 single-family residences to public sewer facilities. The project includes approximately 4,800 feet of new 8-inch gravity sewer collector to be constructed within county right-of-way along Elkhorn Boulevard, West 2nd Street, Chisum Avenue, Willis Avenue, and Magdelina Street (reference Plate IS-1). The proposed alignment would also require an easement along the southern boundary line of a property located at 6133 West 2nd Street to direct flows from the Linda Manor community towards West 2nd Street. Sewer flows from the community would be conveyed north to Sacramento Regional County Sanitation District's (Regional Sanitation) 66-inch sewer interceptor located beneath West Elkhorn Boulevard, which would then direct flows to Regional Sanitation's Sacramento Regional Wastewater Treatment Plant (SRTWP).

Vertical area of potential effect (APE) for ranges from 5 – 32 feet in depth. The proposed gravity sewer line will be located at a depth of 5 – 7 feet throughout the project area except at the connection point to the Regional Sanitation interceptor located beneath W. Elkhorn Boulevard. Excavation at the interceptor is estimated to be 32 feet deep in order to establish a connection and would likely be accessed via a manhole.

CONSTRUCTION METHODS

Construction is to occur within existing county right-of-way (with the exception of an easement along the southern boundary line of a private property at 6133 West 2nd Street) and is estimated to last approximately one to two months. Construction will occur during regular working hours and may require temporary lane closures while in progress. Construction methods may include open trench and/or directional drilling.

OPEN CUT TRENCH

An open cut trench is the conventional method for installing shallow lengths of pipe. Typically this type of construction involves utilizing an excavator, trenching machine, or manual digging to establish a trench in which the pipe will be laid. The trench base usually requires reinforcement such as sand or gravel and is checked for proper slope alignment. The pipe is then placed in the open trench and back fill material such as Class 2 aggregate base, or controlled density fill is used to cover the pipe.

HORIZONTAL DIRECTIONAL DRILLING

Horizontal directional drilling (HDD) is used for long lengths of pipe and consists of two general stages: pilot hole drilling and reaming and pull back. The pilot hole is created with a non-rotating drill string with an asymmetrical leading edge. The asymmetry allows for steering bias and the non-rotating drill string allows the steering bias to be held in a specific position while drilling. The drill string can, however, be rolled when a change of direction is needed. As the pilot hole is drilled, periodic readings are taken of the leading edge by a probe. These measurements are used to calculate the coordinates of any point along the pilot hole relative to the surface. Once the pilot hole is finished, enlarging the hole through the reaming process is typically necessary. Reaming for smaller diameter piping can be accomplished during pipe installation and consists of attaching reamers to the end of the drill string and then pulling the components back through the pilot hole. Prefabricated pipe is attached behind the reaming assembly or drill string and pulled through the widened hole.

ENVIRONMENTAL SETTING

Linda Manor is located approximately 1,600 feet south of the intersection of Elkhorn Boulevard and Marysville Boulevard in the Rio Linda/Elverta community of unincorporated Sacramento County (reference Plate IS-2).

The project site is approximately 56 feet above mean sea level in the northern Sacramento Valley, within the Yolo/American Basin portion of the Central California Valley ecoregion, which is characterized by underlying deep sediments (Griffith et al. 2016). Soils at the project site are composed almost entirely of San Joaquin fine sandy loam, 0 to 3 percent slopes, except for a small portion of the northern section of the project site, which is composed of San Joaquin-Urban land complex, 0 to 3 percent slopes (NRCS 2019). These soils are moderately acidic to neutral and moderately well-drained, with an average depth to duripan of 35 to 60 inches (NRCS 2019).

Surrounding land uses include urban development, rice farms, horse and goat pasture, and open space areas with seasonal wetland, riparian, and annual grassland vegetation. The majority of the region is privately owned and developed for industrial, residential, transportation, and agricultural uses. The project site is situated in an urban development and is part of a highly disturbed and managed landscape with little to no remaining natural vegetation.

Plate IS-1: Proposed Design

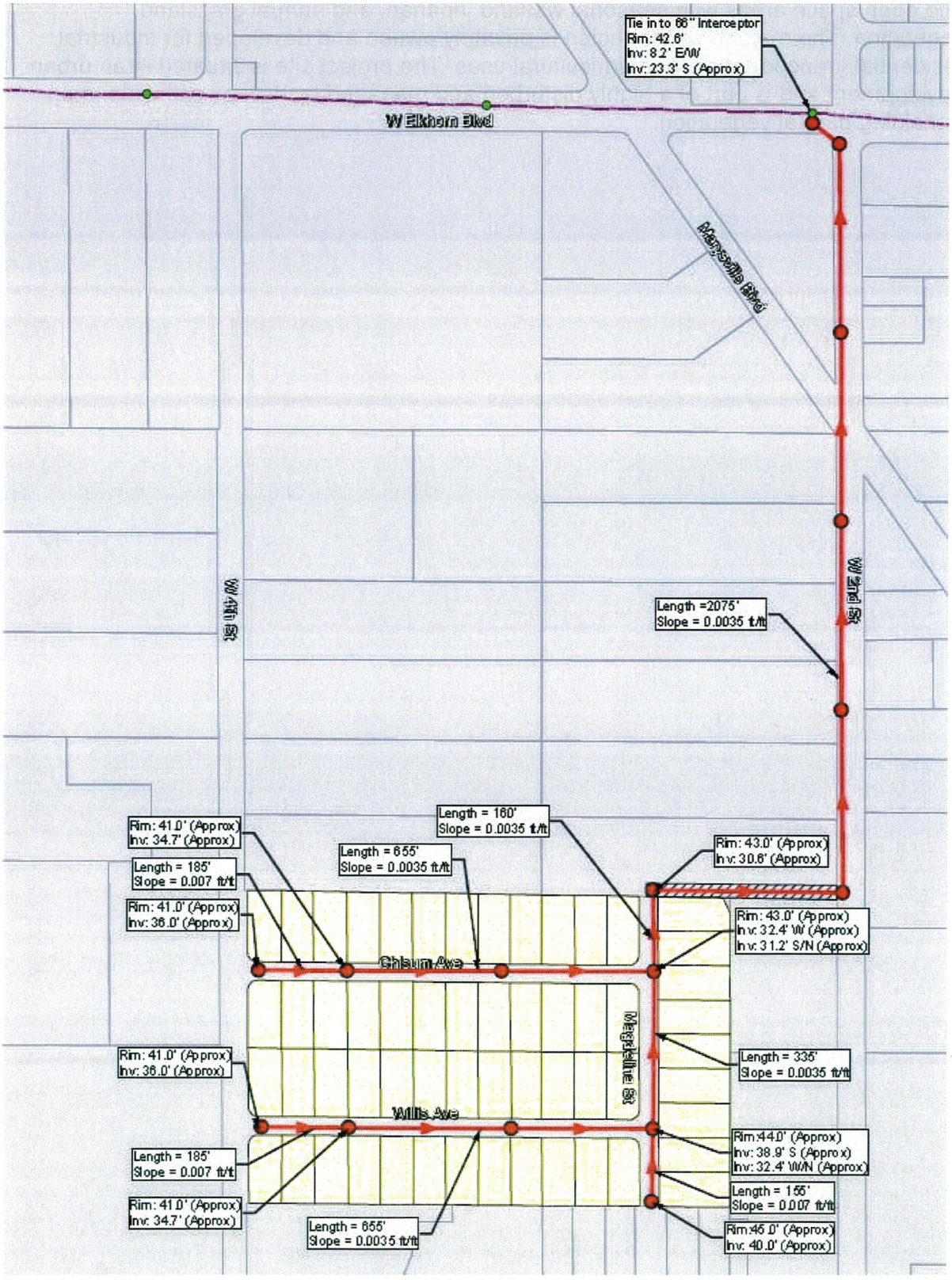
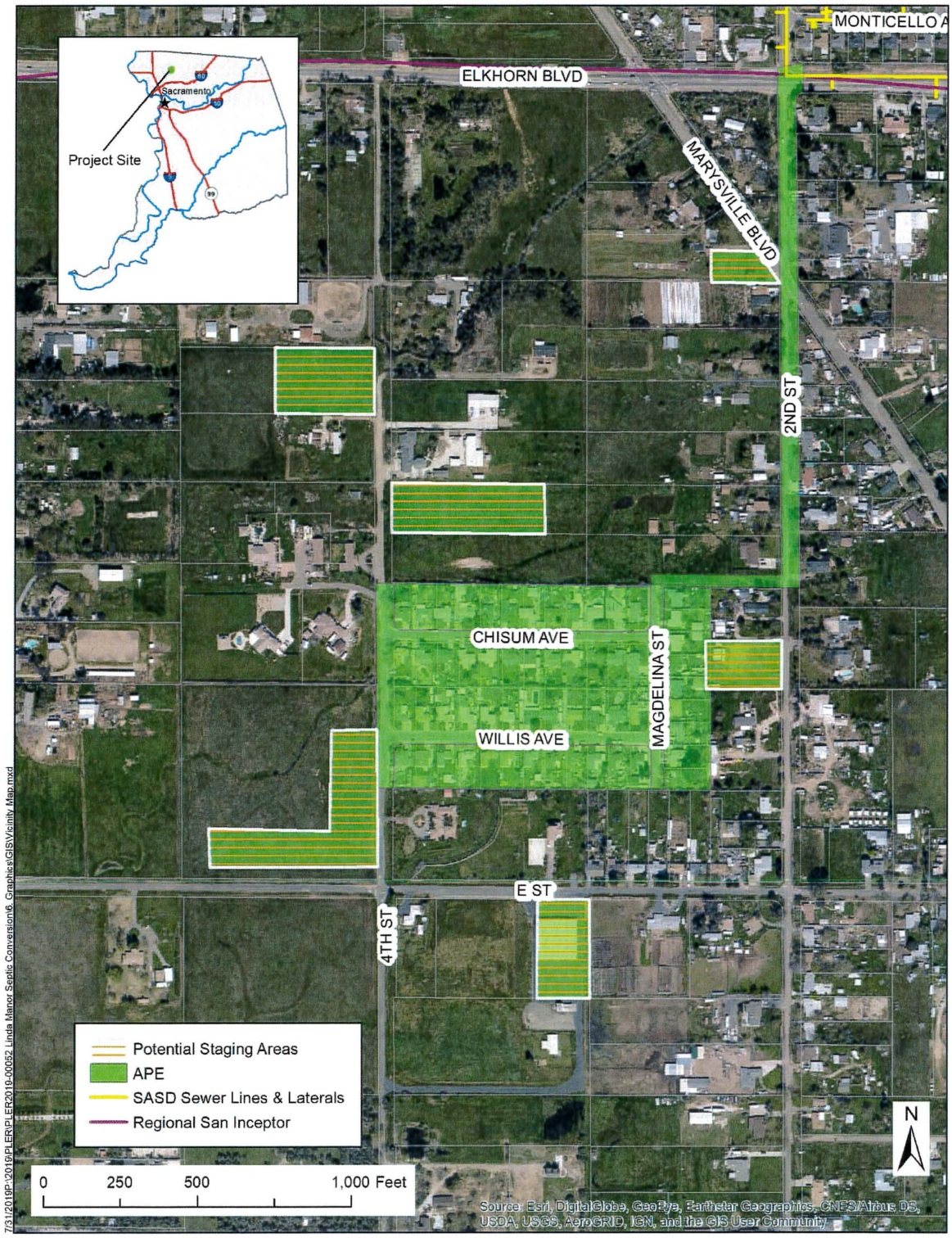


Plate IS-2: Area of Potential Effect & Potential Staging Areas



ENVIRONMENTAL EFFECTS

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed an Initial Study Checklist (located at the end of this report). The Checklist identifies a range of potential significant effects by topical area. The topical discussions that follow are provided only when additional analysis beyond the Checklist is warranted.

BACKGROUND

Some rural communities within Sacramento County rely upon onsite wastewater treatment systems (OWTS), such as septic systems, for treating their raw sewage. In 2012, the State Water Resources Control Board implemented new policy with more stringent requirements for these systems. In response to this policy, the County of Sacramento Environmental Management Department (EMD) adopted a Local Area Management Plan that regulates the operation and maintenance of local OWTS. Parcels with failing septic systems may have trouble replacing or refurbishing them, as older systems located on small parcels cannot meet many of these new requirements, because of setback requirements, buffers, and limited area to site these systems. The Sacramento County Zoning Code mandates that private septic systems for new residential development have a minimum one-acre lot size and have access to public water service.

All of the parcels in this area are less than a quarter acre, which would be out of compliance with the Zoning Code and EMD standards. In the event these systems failed and needed replacement, it is unlikely owners could meet the new setback and reserve disposal field requirements. If a system cannot meet these requirements, the application cannot be approved. A homeowner would then need to apply for a variance to install an advanced treatment system; these systems cost approximately $30,000-$40,000. If the homeowner cannot provide a legal means for wastewater disposal, the dwelling associated with the property would then be deemed uninhabitable.

Linda Manor was identified as a viable community for the conversion project based on cost, constructability, grant eligibility, and community interest. The majority of the systems in the Linda Manor community were installed in the 1960s-1970s and are therefore approximately 40-60 years old. The typical lifespan of septic systems range from 15-40 years, and is largely dependent upon how often the system is inspected and serviced. Although the service history of septic systems in Linda Manor is largely unknown, they likely are in need of replacement, given their age.

The Linda Manor community is categorized as a severely disadvantaged community based on an income survey that resulted in a community annually median household income (MHI) of $37,062, which is less than 60 percent of the statewide MHI. The SASD is applying for financial assistance from the Small Community Wastewater Program, through the Clean Water State Revolving Fund, on behalf of the Linda Manor

community to help cover the costs associated with conversion from septic to sewer systems.

PROJECT ALTERNATIVES

The environmental package for the application for grant funding from the State Water Resources Control Board requires that the applicant evaluate a number of alternatives including a no project/no action alternative. SASD evaluated three potential designs, including the proposed project, as part of their feasibility report. The two alternatives and the No Project scenario are detailed below.

ALTERNATIVE 1: FUTURE 18-INCH TRUNK CONNECTION

This alternative consists of utilizing a future 18-inch trunk sewer at the intersection of West E Street and West 4th Street. SASD does not construct sewer trunks; instead, a future developer would be required to make the improvements and dedicate the infrastructure to SASD as a condition of project approval (Plate IS-3).

ALTERNATIVE 2: WEST 4TH STREET CONNECTION

This alternative mirrors the proposed project; however, the gravity collector would have an alignment along West 4th Street instead of West 2nd Street (Plate IS-4).

ALTERNATIVE 3: WEST 2ND STREET CONNECTION (PROPOSED PROJECT)

This is the proposed alternative and would have an alignment along West 2nd Street (Plate IS-1).

ALTERNATIVE 0: NO PROJECT

This alternative assumes that no construction would occur and that the current residents would remain connected to their existing septic systems.

Plate IS-3: Alternative 1 Design

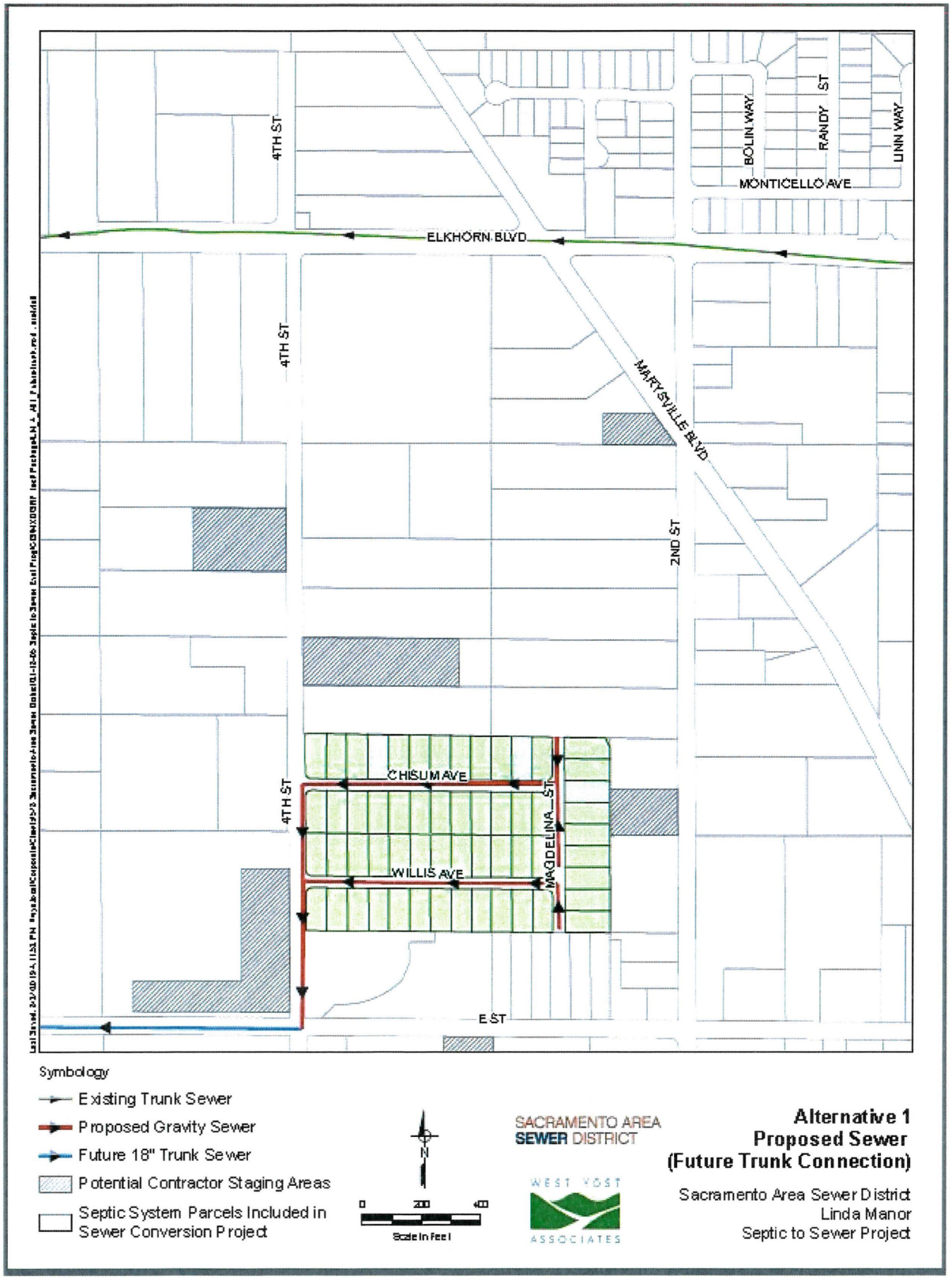
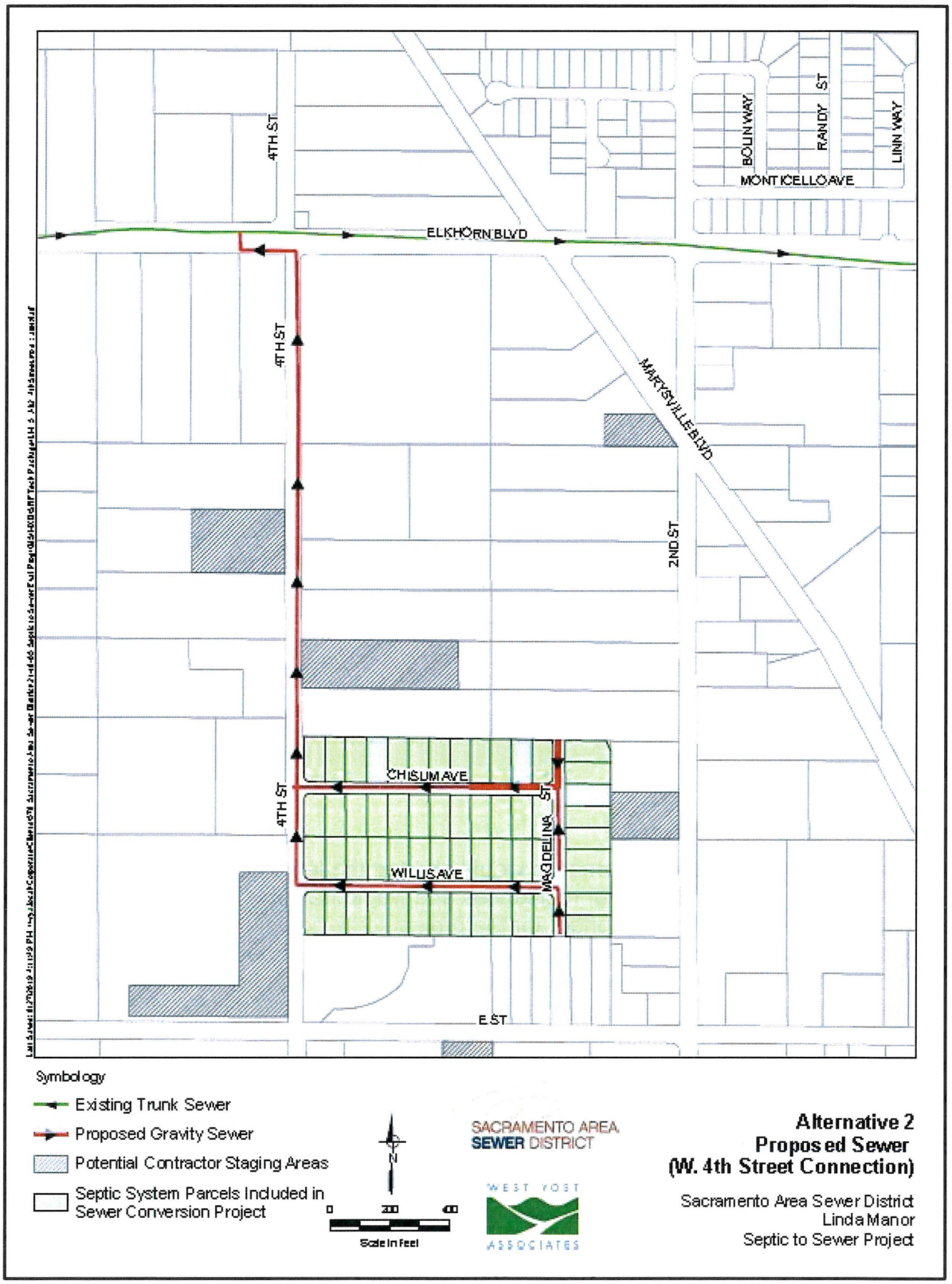


Plate IS-4: Alternative 2 Design



The following discussion evaluates the three project alternatives identified above. It is important to note that there were no significant impacts identified with the proposed project. Table IS-1 summarizes which project objectives are met by the identified alternatives. Table IS-2 summarizes the effect of the alternatives relative to the project.

Table IS-1: Objectives Achieved by Project Alternatives

Project Objectives	Objective Met?		
	Alternative 1	Alternative 2	Alternative 0
Connect Linda Manor residences from private septic to public sewer facilities	Yes	Yes	No
To utilize existing county road right-of-way for alignment of new facilities	Yes	Yes	No
To utilize existing interceptor facilities as a connection point for the proposed gravity connection	No	Yes	No

Table IS-2: Comparison of the Environmental Impacts of the Alternatives in Relation to the Proposed Project

Environmental Topic	Proposed Project	Alternative 1	Alternative 2	Alternative 0
Land Use	LTS	Similar	Similar	None
Hydrology, Drainage, and Water Quality	LTS	Similar	Similar	Potentially Significant
Public Services	LTS	Similar	Similar	None
Traffic and Circulation	LTS	Similar	Similar	None
Air Quality	LTS	Similar	Similar	None
Noise	LTS	Similar	Similar	None
Cultural Resources	LTS	Similar	Similar	None
Biological Resources	LTSM	Similar	Similar	None

LTS = Less Than Significant Impact, LTSM = LTS with Mitigation, None = No Impact

ALTERNATIVE 1: FUTURE TRUNK CONNECTION

The Future Trunk Connection Alternative would shorten the length of gravity sewer lines in order to connect the Linda Manor residences and would have the lowest construction cost, but would take significantly longer for the project to be completed, as SASD does not construct sewer trunks. There is no timeframe for when the future trunk will be constructed. At the time of this document being drafted, the county did not have any applications in for a subdivision map in the area that would require the expansion of sewer facilities. All environmental topic areas are expected to be similar to the project, since the alternative would also utilize existing county right-of-way and construction methods and the only difference would be alignment and connection points.

ALTERNATIVE 2: WEST 4TH STREET CONNECTION

Alternative 2 is very similar to the proposed project; however, this alternative requires a slightly longer alignment, which would lead to higher construction costs. All impacts related to the environmental topic areas are expected to be similar to the project.

ALTERNATIVE 0: NO PROJECT

The No Project Alternative would result in no extension of sewer facilities to service the Linda Manor community. Each residence would remain connected to their respective private septic systems. This alternative would not affect demand for public services, traffic, noise, air quality, biological resources, or cultural resources; however, if a septic system fails, it has the potential to pollute surrounding surface waters and or the underlying ground water, which could be a potentially significant impact to public health and water quality.

DECISION TO CHOOSE PROJECT OVER THE ALTERNATIVES

In regards to environmental impacts, Alternatives 1 & 2, have similar *less than significant* findings for each of the environmental topical areas, as the proposed project. The No Project Alternative would likely not have the potential to affect the environment, as construction would not occur, with water quality being the sole exception. As previously mentioned, failing septic systems have the potential to leak raw sewage into surface and ground waters; therefore, not addressing the issue would be the least favorable alternative.

Although Alternative 1 has the lowest capital and life-cycle costs, this alternative is unfavorable as it depends on the development of the adjacent parcels. There is not an estimated timeframe for when an application for development may occur; since construction of the future trunk is tied to development, this option is not considered feasible for addressing the existing issue.

The proposed project was chosen over Alternative 2 as the capital and life-cycle costs are cheaper. Additionally, the proposed alignment has the opportunity to accommodate other septic conversions on small parcels located along West 2nd Street in the future.

PUBLIC SERVICES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Have adequate wastewater treatment and disposal facilities for full buildout of the project.
- Result in substantial adverse physical impacts associated with the construction of new wastewater treatment or expansion of existing facilities.

SEWER SERVICE & FACILITY CAPACITY

The Regional Sanitation's Board of Directors adopted the Interceptor Sequencing Study (ISS) in February 2013. The ISS updated the Regional Sanitation's Master Plan 2000, which was intended to predict existing and future capacity needs in the regional interceptor system and provide a strategic approach to plan for these capacity needs.

The SASD Board of Directors approved the most current SASD planning document, the 2010 System Capacity Plan Update (SCP) in January 2012. While drafting the 2010

SCP, the project team defined the boundaries of SASD's future service area. The future service area boundaries represent the study area for the 2010 SCP (Plate IS-5). The 2010 SCP is currently being reviewed and SASD plans to have an update in 2020.

PROJECT IMPACTS

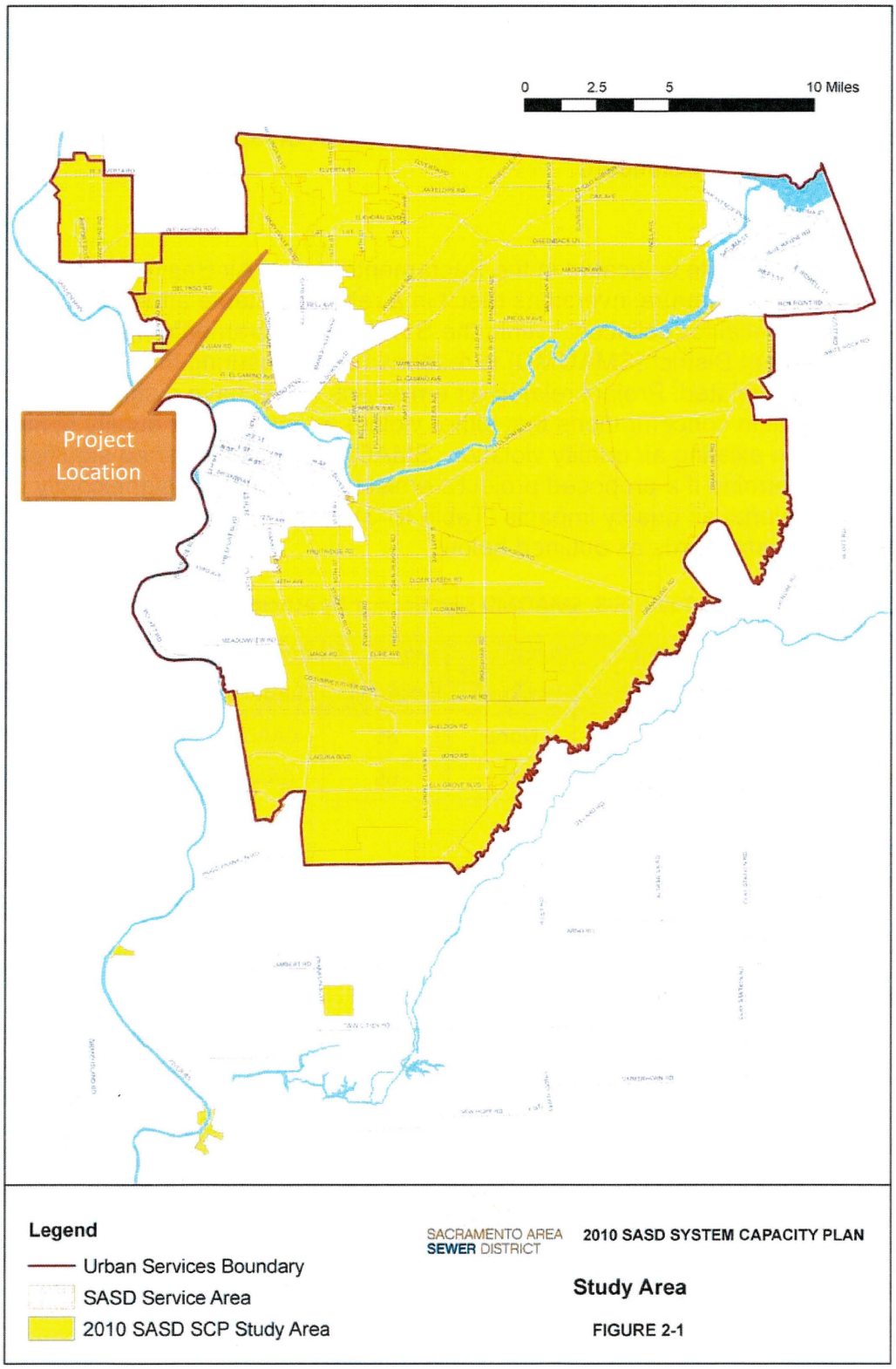
The project consists of an expansion of SASD sewer infrastructure facilities to provide additional wastewater treatment to 57 single-family residences in the Linda Manor community. Construction would include a new 8-inch gravity sewer collector or a 12-inch low-pressure sewer collector (approximately 4,800 linear feet). The new facilities would convey sewer flows to a 66-inch Regional Sanitation's interceptor located at Elkhorn Boulevard, which would be treated at the SRWTP.

The proposed project is located within the 2010 SASD SCP boundaries. The project would result in a negligible increase of sewage flows to SASD and Regional Sanitation systems. The project would not have substantial adverse physical impacts associated with the 4,800 linear feet of new sewer line. Regional Sanitation and SASD have adequate capacity to receive the additional sewage conveyed.

CONCLUSION

Regional Sanitation and SASD have adequate capacity to receive the additional sewage proposed by the project; impacts are ***less than significant***.

Plate IS-5: 2010 SCP Future Service Area Boundaries



AIR QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

REGULATORY SETTING

The proposed project site is located in the Sacramento Valley Air Basin (SVAB). The SVAB's frequent temperature inversions result in a relatively stable atmosphere that increases the potential for pollution. Within the SVAB, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated. Project related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. SMAQMD has established significance thresholds to determine if a proposed project's emission contribution significantly contributes to regional air quality impacts (Table IS-3). The current analysis utilizes the current SMAQMD standards as outlined below.

Table IS-3: SMAQMD Significance Thresholds

	ROG[1] (lbs/day)	NO_x (lbs/day)	CO ($\mu g/m^3$)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Construction (short-term)	None	85	CAAQS[2]	80[3*]	82[3*]
Operational (long-term)	65	65	CAAQS	80[3*]	82[3*]

1. Reactive Organic Gas

2. California Ambient Air Quality Standards

3*. Only applies to projects for which all feasible best available control technology (BACT) and best management practices (BMPs) have been applied. Projects that fail to apply all feasible BACT/BMPs must meet a significance threshold of 0 lbs/day.

CONSTRUCTION EMISSIONS/SHORT-TERM IMPACTS

Short-term air quality impacts are mostly due to dust (PM_{10} and $PM_{2.5}$) generated by construction and development activities, and emissions from equipment and vehicle engines (NO_x) operated during these activities. Dust generation is dependent on soil type and soil moisture, as well as the amount of total acreage actually involved in clearing, grubbing and grading activities. Clearing and earthmoving activities comprise the major source of construction dust generation, but traffic and general disturbance of the soil also contribute to the problem. Sand, lime or other fine particulate materials may be used during construction, and stored on-site. If not stored properly, such materials could become airborne during periods of high winds. The effects of construction activities include increased dust fall and locally elevated levels of suspended

particulates. PM_{10} and $PM_{2.5}$ are considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

PARTICULATE MATTER EMISSIONS

The SMAQMD Guide includes screening criteria for construction-related particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD's construction PM_{10} or $PM_{2.5}$ thresholds of significance provided that the project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); or,
- Require import or export of soil materials that will require a considerable amount of haul truck activity

Some PM_{10} and $PM_{2.5}$ emissions during project construction can be reduced through compliance with institutional requirements for dust abatement and erosion control. These institutional measures include the SMAQMD "District Rule 403-Fugitive Dust" and measures in the Sacramento County Code relating to land grading and erosion control [Title 16, Chapter 16.44, Section 16.44.090(K)].

The SMAQMD Guide includes a list of Basic Construction Emissions Control Practices that should be implemented on all projects, regardless of size. Dust abatement practices are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485; the SMAQMD Guide simply lays out the basic practices needed to comply. Since these are already required by existing rules and regulations, it is not necessary to include them as mitigation.

The project involves trenching activities for installation of the sewer trunk line. Therefore, the project does not meet the screening criteria for PM emissions and further analysis must be conducted. The SMAQMD Road Emissions Model was used to estimate emissions for the Project. The model utilizes equipment, phasing and timelines to generate daily emissions estimates for linear projects including sewer infrastructure. For modeling purposes, maximum numbers of equipment were used, and it was assumed all equipment could operate simultaneously. This represents a conservative estimate to equipment and timelines that demonstrates a 'worst case scenario' in terms of potential emissions. The results are summarized in Table IS-4 below.

OZONE PRECURSOR EMISSIONS (NO_X)

The SMAQMD Guide currently provides screening criteria for construction-related ozone precursor emissions (NO_X) similar to those which will be implemented for particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD's construction NO_X thresholds of significance provided that the project does not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include significant trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills);
- Require import or export of soil materials that will require a considerable amount of haul truck activity; or,
- Require soil disturbance (i.e., grading) that exceeds 15 acres per day. Note that 15 acres is a screening level and shall not be used as a mitigation measure.

The project involves trenching activities for installation of the sewer trunk line. Therefore, the project does not meet the screening criteria for NOx emissions and further analysis must be conducted. The SMAQMD Road Emissions Model was used to estimate emissions for the project. The model utilizes equipment, phasing and timelines to generate daily emissions estimate. For modeling purposes, maximum numbers of equipment were used, and it was assumed all equipment could operate simultaneously. This represents a conservative estimate to equipment and timelines that demonstrates a 'worst case scenario' in terms of potential emissions. The results are summarized in Table IS-4 below.

Table IS-4: Road Emissions Model Results

Construction Year	Constituent in pounds per day			
	ROG	NOx	PM_{10}	$PM_{2.5}$
2021 Thresholds	n/a	85	80	82
Estimated Emissions	2.73	27.93	1.85	1.35

CONSTRUCTION EMISSIONS CONCLUSION

As shown in the above table, the project will not exceed the SMAQMD construction significance thresholds for NOx, PM_{10} or $PM_{2.5}$; therefore, impacts associated with emissions for air quality standards are ***less than significant***.

HYDROLOGY AND WATER QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or offsite;
- Substantially alter the existing drainage pattern of the site ore area, including through the alteration of the course of a stream or river, or substantially increase the amount of surface runoff in a manner which would result in flooding on- or offsite.
- Impede or redirect flood flows.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD ZONE DESIGNATION

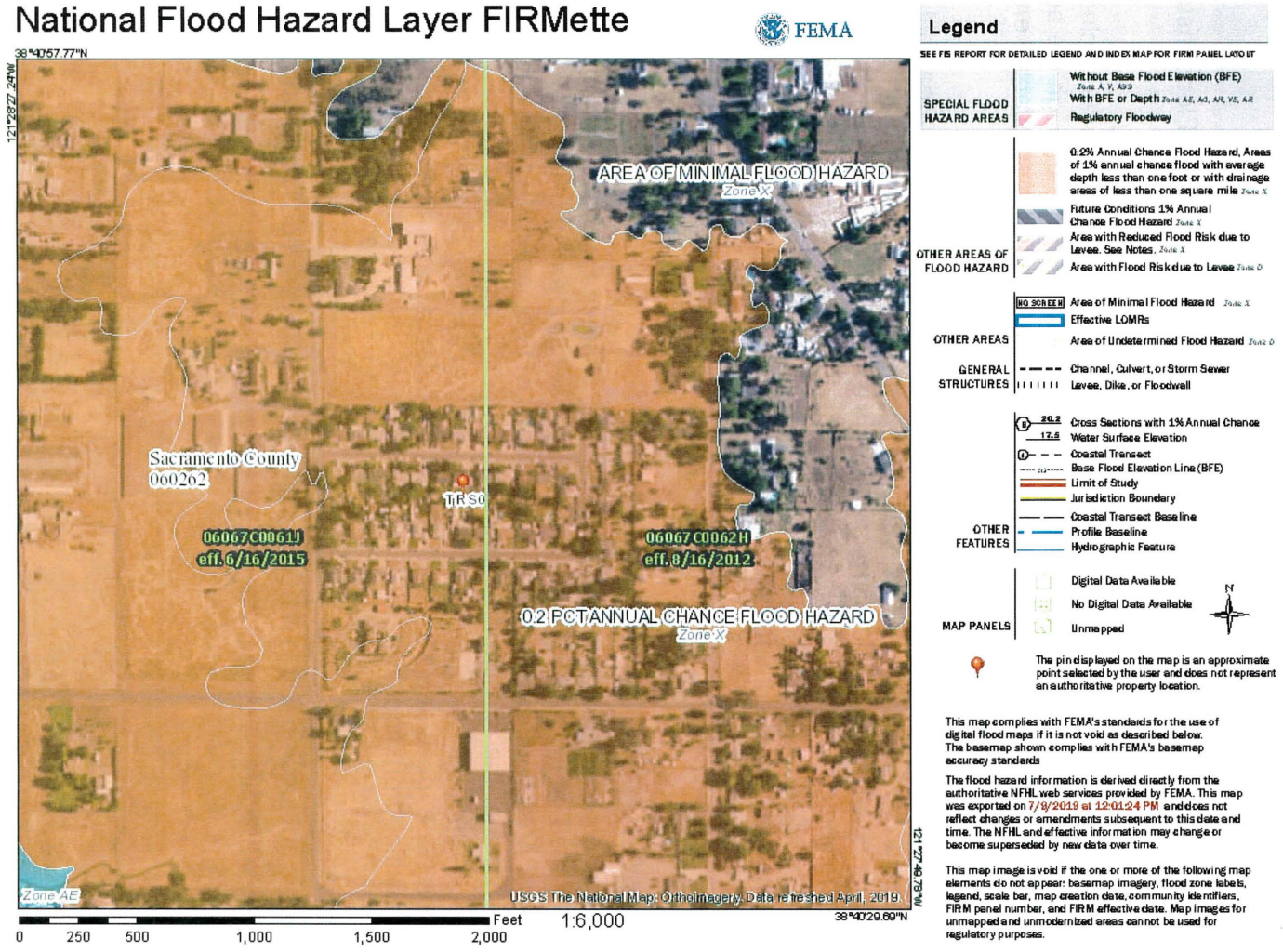
DISCUSSION OF PROJECT IMPACTS

The project is located within a FEMA "0.2% Annual Chance Flood Hazard Zone X" area (reference Plate IS-6). This designation signifies that the area is not within a Special Flood Hazard Area and had a 0.2% annual chance of flooding (500-year flood). The project will not alter the existing drainage pattern in such a way that it causes flooding, contributes to runoff that would exceed the capacity of existing or planned stormwater infrastructure, or expose people or structures to substantial loss of life, health, or property resulting from flooding.

CONCLUSION

The project is not located within a FEMA designated 100-year floodplain. Impacts are ***less than significant***.

Plate IS-6: FEMA FIRMette



WATER QUALITY

CONSTRUCTION WATER QUALITY: EROSION AND GRADING

Construction on undeveloped land exposes bare soil, which can be mobilized by rain or wind and displaced into waterways or become an air pollutant. Construction equipment can also track mud and dirt onto roadways, where rains will wash the sediment into storm drains and thence into surface waters. After construction is complete, various other pollutants generated by site use can also be washed into local waterways. These pollutants include; but are not limited to: vehicle fluids, heavy metals deposited by vehicles, and pesticides or fertilizers used in landscaping.

Sacramento County has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by Regional Water Board. The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type. In addition, Sacramento County Code 16.44 (Land Grading and Erosion Control) requires private construction sites disturbing one or more acres or moving 350 cubic yards or more of earthen material to obtain a grading permit. To obtain a grading permit, project proponents must prepare and submit for approval an Erosion and Sediment Control (ESC) Plan describing erosion and sediment control best management practices (BMPs) that will be implemented during construction to prevent sediment from leaving the site and entering the County's storm drain system or local receiving waters. Construction projects not subject to SCC 16.44 are subject to the Stormwater Ordinance (SCC 15.12) described above.

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities (CGP). CGP coverage is issued by the State Water Resources Control Board (State Board) http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml and enforced by the Regional Water Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction and verified by receiving a WDID#. The CGP requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector.

Applicable projects applying for a County grading permit must show proof that a WDID # has been obtained and must submit a copy of the SWPPP. Although the County has no

enforcement authority related to the CGP, the County does have the authority to ensure sediment/pollutants are not discharged and is required by its Municipal Stormwater Permit to verify that SWPPPs include the minimum components.

The project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's CGP.

Erosion controls should always be the *first line of defense*, to keep soil from being mobilized in wind and water. Examples include stabilized construction entrances, tackified mulch, 3-step hydroseeding, spray-on soil stabilizers and anchored blankets. Sediment controls are the *second line of defense*; they help to filter sediment out of runoff before it reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked or weighted straw wattles/fiber rolls, and silt fences.

In addition to erosion and sediment controls, the project must have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains. Such practices include, but are not limited to: filtering water from dewatering operations, providing proper washout areas for concrete trucks and stucco/paint contractors, containing wastes, managing portable toilets properly, and dry sweeping instead of washing down dirty pavement.

It is the responsibility of the project proponent to verify that the proposed BMPs for the project are appropriate for the unique site conditions, including topography, soil type and anticipated volumes of water entering and leaving the site during the construction phase. In particular, the project proponent should check for the presence of colloidal clay soils on the site. Experience has shown that these soils do not settle out with conventional sedimentation and filtration BMPs. The project proponent may wish to conduct settling column tests in addition to other soils testing on the site, to ascertain whether conventional BMPs will work for the project.

If sediment-laden or otherwise polluted runoff discharges from the construction site are found to impact the County's storm drain system and/or Waters of the State, the property owner will be subject to enforcement action and possible fines by the County and the Regional Water Board.

CONCLUSION

Project compliance with requirements outlined above, as administered by the County and the Regional Water Board will ensure that project-related erosion and pollution impacts are ***less than significant***.

OPERATION: STORMWATER RUNOFF

Development and urbanization can increase pollutant loads, temperature, volume and discharge velocity of runoff over the predevelopment condition. The increased volume, increased velocity, and discharge duration of stormwater runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage systems. Studies have demonstrated a direct correlation between the

degree of imperviousness of an area and the degradation of its receiving waters. These impacts must be mitigated by requiring appropriate runoff reduction and pollution prevention controls to minimize runoff and keep runoff clean for the life of the project.

The County requires that projects include source and/or treatment control measures on selected new development and redevelopment projects. Source control BMPs are intended to keep pollutants from contacting site runoff. Examples include "No Dumping-Drains to Creek/River" stencils/stamps on storm drain inlets to educate the public, and providing roofs over areas likely to contain pollutants, so that rainfall does not contact the pollutants. Treatment control measures are intended to remove pollutants that have already been mobilized in runoff. Examples include vegetated swales and water quality detention basins. These facilities slow water down and allow sediments and pollutants to settle out prior to discharge to receiving waters. Additionally, vegetated facilities provide filtration and pollutant uptake/adsorption. The project proponent should consider the use of "low impact development" techniques to reduce the amount of imperviousness on the site, since this will reduce the volume of runoff and therefore will reduce the size/cost of stormwater quality treatment required. Examples of low impact development techniques include pervious pavement and bioretention facilities.

The County requires developers to utilize the *Stormwater Quality Design Manual for the Sacramento Region, 2018* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. Regardless of project type or size, developers are required to implement the minimum source control measures (Chapter 4 of the Design Manual). Low impact development measures and Treatment Control Measures are required of all projects exceeding the impervious surface threshold defined in Table 3-2 and 3-3 of the Design Manual. Further, depending on project size and location, hydromodification control measures may be required (Chapter 5 of the Design Manual).

Updates and background on the County's requirements for post-construction stormwater quality treatment controls, along with several downloadable publications, can be found at the following websites:

http://www.waterresources.saccounty.net/stormwater/Pages/default.aspx

http://www.beriverfriendly.net/Newdevelopment/

The final selection and design of post-construction stormwater quality control measures is subject to the approval of the County Department of Water Resources; therefore, they should be contacted as early as possible in the design process for guidance.

CONCLUSION

Project compliance with requirements outlined above will ensure that project-related stormwater pollution impacts are ***less than significant***.

BIOLOGICAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community.
- Have a substantial adverse effect on riparian habitat or other sensitive natural communities.
- Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies.

WETLANDS AND OTHER SURFACE WATERS

Federal and state regulation (Clean Water Act Sections 404 and 401) uses the term "surface water" to refer to all standing or flowing water which is present above-ground either perennially or seasonally. There are many types of surface waters, but the two major groupings are linear waterways with a bed and bank (streams, rivers, etc.) and wetlands. The Clean Water Act has defined the term wetland to mean "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions". The term "wetlands" includes a diverse assortment of habitats such as perennial and seasonal freshwater marshes, vernal pools, and wetted swales. The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland and is therefore subject to local, State or Federal regulation of that habitat type. A delineation verification by the Army Corps will verify the size and condition of the wetlands and other waters in question, and will help determine the extent of government jurisdiction.

Wetlands are regulated by both the federal and state government, pursuant to the Clean Water Act Section 404 (federal) and Section 401 (state). The United States Army Corps of Engineers (Army Corps) is generally the lead agency for the federal permit process, and the Regional Water Quality Control Board (Regional Water Board) is generally the lead agency for the state permit process. The Clean Water Act protects all "navigable waters", which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Isolated wetlands, that is, those wetlands that are not hydrologically connected to other "navigable" surface waters (or their tributaries), are not considered to be subject to the Clean Water Act.

In addition to the Clean Water Act, the state also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act, which does not require

that waters be "navigable". For this reason, Federal non-jurisdictional waters – isolated wetlands – can be regulated by the State of California pursuant to Porter-Cologne.

The Clean Water Act establishes a "no net" loss" policy regarding wetlands for the state and federal governments, and General Plan Policy CO-58 establishes a "no net loss" policy for Sacramento County. Pursuant to these policies, any wetlands to be excavated or filled require 1:1 mitigation, and construction within the wetlands cannot take place until the appropriate permit(s) have been obtained from the Army Corps, the U.S. Fish and Wildlife Service (USFWS), the Regional Water Board, the California Department of Fish and Wildlife (CDFW) and any other agencies with authority over surface waters. Any loss of delineated wetlands not mitigated for through the permitting process must be mitigated, pursuant to County policy. Appropriate mitigation may include establishment of a conservation easement over wetlands, purchase of mitigation banking credits, or similar measures.

DISCUSSION OF PROJECT IMPACTS

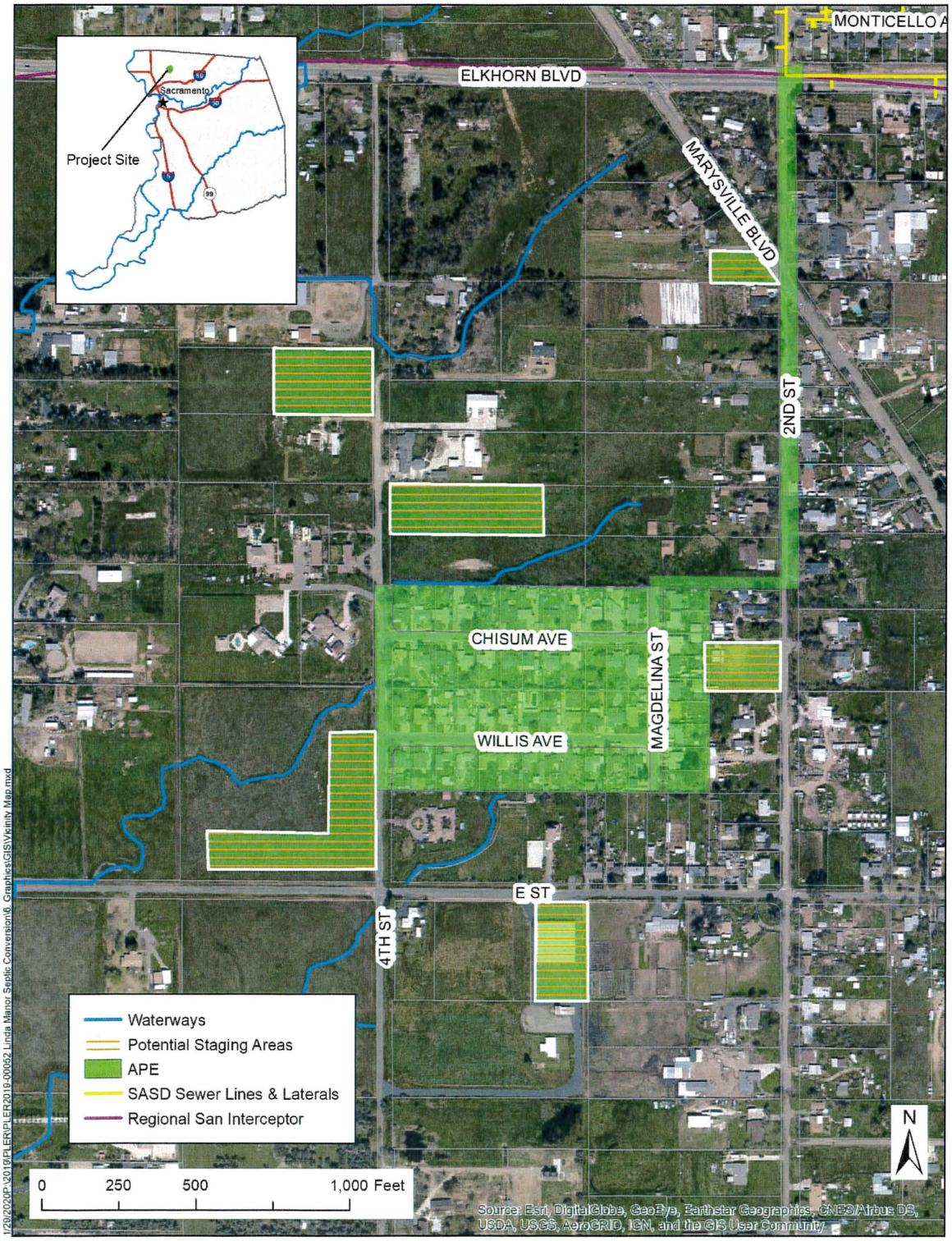
No in-water work is being proposed; however, several man-made roadside ditches are located within the project area, which may fall under state jurisdiction. Similarly, potential staging areas west of West 4th Street consist of relatively undisturbed annual grassland habitat that have potential to support seasonal aquatic features, including vernal pools; however, access to these sites (private property) was not available at the time of these documents. Aquatic features were not visible from the county right-of-way.

Since aquatic features were not visible from county right-of-way and access to the sites had not been granted, a review of county aerial imagery, USFWS National Wetland Inventory Mapper, county geographic information systems (GIS) data, and the AECOM biological report were utilized to assess potential aquatic features on private property.

County aerial imagery from several different years show saturated areas, which may be classified as jurisdictional waters, on two of properties identified for potential staging. County GIS indicates that an intermittent waterway runs southwesterly from the property immediately north of Linda Manor southwesterly to the property west of the subdivision (reference Plate IS-7). The National Wetland Inventory Mapper classifies the stream feature as a "Freshwater Emergent Wetland". The biological report identifies the subject feature as a seasonal swale.

The proposed staging areas occur 100 feet beyond the features identified in each of these sources; however, an aquatic resources survey will be required to identify all aquatic features on-site if either of these properties are selected for staging. If aquatic features are identified on-site, appropriate buffers will be established, construction related BMPs will be implemented, and compliance with state and federal regulations will be adhered to.

Plate IS-7: Linear Aquatic Features near Proposed Project



CONCLUSION

Construction related BMPs will be utilized to avoid construction-related erosion and water quality impacts to any potential seasonal aquatic features. Compliance with the County Stormwater Ordinance and mitigation requiring an aquatic resource inventory survey be conducted prior to construction start, will ensure that construction-related erosion and pollution impacts related to water quality are ***less than significant***.

SPECIAL STATUS SPECIES

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. In 1984, the State of California enacted a similar law, the California Endangered Species Act (CESA), to protect species identified and listed by the California Fish and Game Commission as endangered or threatened with extinction.

CESA and FESA are intended to operate in conjunction with CEQA and the National Environmental Policy Act (NEPA) to help protect ecosystems that endangered and threatened species depend upon. USFWS is responsible for implementation of the FESA while the CDFW implements the CESA.

Accidental or intentional killing of a threatened or endangered species is labeled "take." "Take" is defined by the FESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any threatened or endangered wildlife species. Take may include significant habitat modification or degradation and is applied to threatened or endangered plant species as well.

Take, incidental to an otherwise lawful activity, may be authorized by one of two procedures. If a federal agency is involved with the permitting, funding, or carrying out of the project, then initiation of formal consultation between that agency and USFWS pursuant to Section 7 of the FESA is required if a proposed project may affect a federally listed species. Such consultation would result in a biological opinion that addresses the anticipated effects of the project to listed species and may authorize a limited level of incidental take. If a federal agency is not involved with the project, and federally listed species may be taken as part of the project, then an incidental take permit pursuant to Section 10(a) of the FESA must be obtained. USFWS may issue such a permit upon completion of a satisfactory conservation plan for any listed species that would be affected by the project.

Special-status species are tracked in CDFW's California Natural Diversity Database (CNDDB), a statewide inventory of the locations and conditions of the state's rarest plant and animal taxa and vegetation types. CDFW's CRPR includes five rarity and endangerment ranks for categorizing plant species of concern. All plants with a CRPR are considered "special plants" by CDFW. The term "special plants" is a broad term used by CDFW to refer to all of the plant taxa inventoried in the CNDDB, regardless of their legal or protection status. Plants ranked as CRPR 1A (plants presumed to be extinct in California), 1B (plants that are rare, threatened, or endangered in California and elsewhere), and 2 (plants that are rare, threatened, or endangered in California but more common elsewhere) may qualify as endangered, rare, or threatened species within the definition of State CEQA Guidelines (CCR Section 15380). In general, plant

species ranked CRPR 3 (plants about which more information is needed) and 4 (plants of limited distribution) do not meet the definition of endangered, rare, or threatened pursuant to CEQA Section 15380. As such, CRPR 3 and 4 species are not included in this analysis.

The term "California species of special concern" is applied by CDFW to animals not listed under the federal ESA or CESA, but that are considered to be declining at a rate that could result in listing, or historically occurred in low numbers and known threats to their persistence currently exist. CDFW's fully protected status was California's first attempt to identify and protect animals that were rare or facing extinction. Most species listed as fully protected were eventually listed as threatened or endangered under CESA; however, some species remain listed as fully protected but do not have simultaneous listing under CESA. Fully protected species may not be taken or possessed at any time and no take permits can be issued for these species except for scientific research purposes or for relocation to protect livestock.

Under CEQA, species of animals or plants presumed to be endangered, rare, or threatened as listed in the California Code of Regulation or Federal Code of Regulation; those officially proposed for listing (federal classification), candidate species (federal and state classification), and species of special concern (State of California classification) are given similar treatment as protected animal species. Plants identified as 1A, 1B, and 2A, 2B by the California Native Plant Society are treated similarly under CEQA.

A list of special-status species known or with potential to occur on the project site or in the immediate vicinity was developed from database queries of USFWS' Information for Planning and Consultation (IPaC), CDFW's California Natural Diversity Database (CNDDB), and the California Native Plant Society Inventory (CNPS), together with a reconnaissance-level biological survey conducted by AECOM biological staff on August 21, 2019.

SPECIAL-STATUS PLANTS

Table IS-5 provides a list of the special-status plant species that have been documented in the CNDDB search (Rio Linda, Carmichael, Pleasant Grove, Sacramento East, Roseville, Sacramento West, Taylor Monument, Verona, & Citrus Heights) and describes their regulatory status, habitat, and potential for occurrence on the project site.

Table IS-5: Special-Status Plant Species with Potential to Occur in the Project Biological Study Area

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements	Elevation Range (ft)	Bloom Period	Potential for Occurrence[3]
		USFWS	CDFW	CRPR				
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	-	-	1B.1	Subalkaline flats on overflow land in the Central Valley; usually seen in dry, adobe soil in meadows and seeps (wetlands) in valley and foothill grassland.	5–245	Apr–May	**No potential;** no suitable habitat (alkaline flats, adobe soil) is present in the study area.
Balsamorhiza macrolepis	big-scale balsamroot	-	-	1B.2	Ultramafic soils, sometimes serpentinite, in chaparral, valley and foothill grassland, and cismontane woodland.	145–5,100	Mar–Jun	**No potential;** outside the elevation range of this species.
Chloropyron molle ssp. *hispidum*	hispid salty bird's beak	-	-	1B.1	Alkali playa, meadows and seeps, wetlands; in damp alkaline soils, especially in alkaline meadows and alkali sinks with Distichlis.	0–510	Jun–Sep	**No potential;** no suitable habitat (alkaline soils) is present in the study area.
Downingia pusilla	dwarf downingia	-	-	2B.2	Vernal lake and pool margins in valley and foothill grassland; and in roadside ditches.	0–1,460	Mar–May	**Could occur;** suitable habitat may be present on the proposed southwestern staging area. Two records of this species are approximately 3 miles northeast of the study area, in northern hardpan vernal pool habitat (CDFW 2019).
Gratiola heterosepala	Boggs Lake hedge hyssop	-	SE	1B.2	Clay soils; usually in vernal pools, sometimes on lake margins.	30–7,790	Apr–Aug	**No potential;** clay soils are not present and therefore, no suitable habitat is present in the study area.
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	-	-	1B.2	Moist, freshwater-soaked river banks and low peat islands in sloughs; also can occur on riprap and levees. In California, known from the Delta watershed.	0–395	Jun–Sep	**No potential;** no suitable habitat (river banks, peat islands, or levees) present in the study area.
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	-	-	1B.2	Restricted to the edges of vernal pools in grassland.	95–750	Mar–May	**No potential;** outside of elevation range of this species.

Juncus leiospermus var. *leiospermus*	Red Bluff dwarf rush	-	-	1B.1	Vernally mesic sites, sometimes on edges of vernal pools, in chaparral, valley and foothill grassland, and cismontane woodland.	110–4,100	Mar–Jun	**No potential;** outside the elevation range of this species.
Legenere limosa	legenere	-	-	1B.1	In beds of vernal pools; wet places; ponds.	0–2,885	Apr–Jun	**Could occur;** uitable habitat may be present on the proposed southwestern staging area. One record of this species is approximately 1.4 miles southeast of the project site in a seasonal wetland (CDFW 2019).
Orcuttia viscida	Sacramento Orcutt grass	FE	SE	1B.1	Vernal pools	45–280	Apr–Jul (Sep)	**Not likely to occur;** although suitable habitat (vernal pools) could be present in the proposed southwestern staging area, the nearest record of this species is more than 15 miles southeast of the study area, in mudflow vernal pools with rocky bottoms (CDFW 2019).
Sagittaria sanfordii	Sanford's arrowhead	-	-	1B.2	In standing or slow-moving freshwater ponds, marshes, and ditches	0–2,135	May–Oct (Nov)	**No potential;** no suitable habitat (standing or slow-moving freshwater) is present. Roadside ditches in the study area were dry at the time of the survey and are likely dry for most of the year.
Symphyotrichum lentum	Suisun Marsh aster	-	-	1B.2	Marshes and swamps (brackish and freshwater); most often seen along sloughs with Phragmites, Scirpus, Typha, etc.	0–10	(Apr) May–Nov	**No potential;** outside the elevation range of this species.

[1] Regulatory Status Definitions:
Federal Status Categories
FE = Listed as endangered under the Federal Endangered Species Act
FT = Listed as threatened under Federal Endangered Species Act
California State Status Categories
SE = Listed as endangered under California Endangered Species Act
ST = Listed as threatened under California Endangered Species Act
California Rare Plant Rank (CRPR) Categories:
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
CRPR Threat Rank Extensions:
.1 Seriously endangered in California (>80% of occurrences are threatened and/or high degree and immediacy of threat)
.2 Fairly endangered in California (20 to 80% of occurrences are threatened)
.3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
[2] MSL = mean sea level
[3] Potential for Occurrence:
Could Occur: The project site is within the species' range, and no occurrences of the species have been recorded on the project site; however, suitable habitat for the species is present and recorded occurrences of the species are generally present in the vicinity.
Not Likely to Occur: No occurrences of the species have been recorded within or immediately adjacent to the project site, and either habitat for the species is marginal or potentially suitable habitat may occur, but the species' current known range is restricted to areas far from the project site.
No Potential to Occur: The project site is outside the species' range or suitable habitat for the species is absent from the project site and adjacent areas.
Sources: CDFW 2019; CNPS 2019a

DISCUSSION OF PROJECT IMPACTS

No special-status species were found from the county right-of-way during a biological survey conducted on August 21, 2019, by AECOM staff; however, two special-status plant species dwarf downingia (*Downingia pusilla*) and legenere (*Legenere limosa*) have the potential to occur within roadside ditches adjacent to the project site. Areas identified as potential staging areas were not surveyed, as access had not been granted by private property owners. These staging areas may contain seasonal wetlands that could provide suitable habitat. If seasonal wetlands are identified within staging areas or adjacent to the project site which could result in take of any special-status plant species, rare plant surveys shall be conducted prior to construction.

CONCLUSION

Compliance with the recommended mitigation measure for surveys will ensure that potential impacts to special-status plant species are ***less than significant***.

SPECIAL STATUS WILDLIFE

Table IS-6 provides a list of the special-status wildlife species that have been documented within the CNDDB search area (Rio Linda, Carmichael, Pleasant Grove, Sacramento East, Roseville, Sacramento West, Taylor Monument, Verona, & Citrus Heights) and USFWS IPaC results for Sacramento County. The table describes their regulatory status, habitat, and potential for occurrence on the project site.

Table IS-6: Special-Status Wildlife Species with Potential to Occur in the Project Biological Study Area

Scientific Name	Common Name	Regulatory Status[1]			Habitat Requirements	Distribution	Potential for Occurrence[2]
		Federal	State	CDFW			
Crustaceans							
Branchinecta lynchi	vernal pool fairy shrimp	FT	-	-	Vernal pools in valley and foothill grassland; small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains.	**Could occur;** suitable habitat may be present on the proposed southwestern staging area. Eleven records of this species are within 3 miles of the study area in vernal pool habitats (CDFW 2019).
Lepidurus packardi	vernal pool tadpole shrimp	FE	-	-	Vernal pools in valley and foothill grassland; pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Sacramento Valley	**Could occur;** suitable habitat may be present on the proposed southwestern staging area. One record of this species is approximately 1.5 miles northwest of the study area in seasonal wetland habitat (CDFW 2019).
Insects							
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT	-	-	Riparian scrub. Host plant is the elderberry shrub (*Sambucus nigra*). Prefers to lay eggs in elderberries 2–8 inches in diameter; some preference shown for "stressed" elderberries.	Occurs only in the Central Valley.	**No potential;** no suitable habitat (elderberry shrubs) is present.
Fish							
Archoplites interruptus	Sacramento Perch	-	-	SSC	Aquatic; prefers warm water. Aquatic vegetation is essental for young. Tolerates wide range of physio-chemical water conditions.	Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley.	**No potential;** no suitable aquatic habitat is present.
Oncorhynchus mykiss irideus pop. 11	Steelhead – Cental Valley DPS	FT	-	-	Aquatic; Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters	Populations in the Sacramento and San Joaquin rivers and their tributaries.	**No potential;** no suitable aquatic habitat is present.
Oncorhynchus tshawytscha pop. 6	Chinook Salmon – Central Valley sprint-run ESU	FT	ST	-	Aquatic; Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters. Water temps >27°Celsius are lethal to adults.	Federal listing refers to populations spawning in the Sacramento River and tributaries.	**No potential;** no suitable aquatic habitat is present.

Oncorhynchus tshawytscha pop. 7	Chinook Salmon – Sacramento River winter-run ESU	FE	SE	-	Aquatic; Sacramento/San Joaquin flowing waters. Requires clean, cold water over gravel beds with water temperatures between 6° and 14° Celsius for spawning.	Sacramento River below Keswick Dam. Spawns in the Sacramento River, but not in tributary streams.	**No potential;** no suitable aquatic habitat is present.
Pogonichthys macrolepidotus	Sacramento Splittail	-	-	SSC	Aquatic; estuary, freshwater mars, Sacramento/San Joaquin flowing waters. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay, and associated marshes.	**No potential;** no suitable aquatic habitat is present.
Spirinchus thaleichthys	Longfin Smelt	FC	ST	-	Aquatic; found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Found along the Pacific Coast, from Alaska to California.	**No potential;** no suitable aquatic habitat is present.
Hypomesus transpacificus	Delta Smelt	FT	SE	-	Aquatic; inhabits estuarine areas in the Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait & San Pablo Bay. Seldom found at salinities > 10 ppt. Most often at salinities < 2ppt.	Endemic to California; only occurs in the San Francisco Estuary.	**No potential;** no suitable aquatic habitat is present.
Amphibians							
Spea hammondii	western spadefoot	-	-	SSC	Occurs primarily in grassland habitats, but can be found in valley–foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Throughout the Central Valley and adjacent foothills.	**Not likely to occur;** although suitable habitat may be present in the proposed southwestern staging area, the nearest record of this species is approximately 9 miles to the northwest (CDFW 2019).
Rana draytonii	California red-legged frog	FT	-	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Isolated populations in the Sierra Nevada, northern Coast, and northern Transverse Ranges. Common in the San Francisco Bay area (including Marin County) and along the central coast.	**No potential;** no suitable aquatic habitat is present.

Ambystoma californiense	California tiger salamander	FT	ST	WL	Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Restricted to California, where it is found mostly in the Central Valley. Small populations also occur around Santa Barbara and Sonoma.	**Not likely to occur;** although suitable habitat may be present in the proposed southwestern staging area, there are no records of this species within a 9-quad area. The nearest record of this species is more than 19 miles to the southwest near a managed wildlife habitat area (CDFW 2019).
Reptiles							
Emys marmorata	western pond turtle	-	-	SSC	Aquatic; ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	West of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Below 6,000 feet elevation.	**No potential;** no suitable aquatic habitat is present.
Thamnophis gigas	giant gartersnake	FT	ST	-	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches.	Historical range was in the Sacramento and San Joaquin valleys but its current range is much reduced, and it apparently is extirpated south of Fresno County, except for western Kern County.	**No potential;** no suitable aquatic habitat is present.
Birds							
Agelaius tricolor (nesting colony)	tricolored blackbird	-	ST	SSC	Highly colonial. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Most numerous in the Central Valley and vicinity. Generally endemic to California.	**No potential;** no suitable nesting habitat is present.
Ammodramus savannarum (nesting)	grasshopper sparrow	-	-	SSC	Valley and foothill grassland. Dense grasslands with thick herbaceous cover on rolling hills, lowland plains, valleys, and hillsides on lower mountain slopes. Favors a mix of forbs, grasses, and shrubs.	Foothills and lowlands west of the Cascade-Sierra Nevada crest, from Mendocino and Trinity counties south to San Diego County.	**Not likely to occur;** although suitable habitat (dense grassland) is present in two of the proposed staging areas, only one record of this species is within a 9-quad area, and it is more than 15 miles to the northwest in rolling vernal pool grassland habitat (CDFW 2019).

Athene cunicularia (burrow sites and some wintering sites)	burrowing owl	-	-	SSC	Open, dry, annual or perennial grasslands, deserts, and scrublands, characterized by low-growing vegetation. Dependent on burrowing mammals, most notably, the California ground squirrel, for underground nests.	Resident throughout California in suitable habitat.	**Could occur;** suitable habitat could be present along the edges of the proposed staging areas, where annual grassland is mowed for firebreaks and access roads. Nine records of this species are within 3 miles of the study area (CDFW 2019).
Buteo swainsoni (nesting)	Swainson's hawk	-	ST	-	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas, such as grasslands, or alfalfa or grain fields supporting rodent populations.	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert.	**Could occur;** suitable nesting habitat (large trees) is present within and adjacent to project footprint, and limited neighboring foraging habitat (grassland) is present to the west and south. There are 6 ecords of this species are within 3 miles of the study area (CNDDB 2019). All of the occurences are located along Dry Creek (north) to the southwest.
Coccyzus americanus occidentalis (nesting)	western yellow-billed cuckoo	FT	SE	-	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Valley foothill and desert riparian habitats in scattered locations in California.	**No potential;** no suitable riparian nesting habitat is present.
Elanus leucurus (nesting)	white-tailed kite	-	-	FP	Open grasslands, meadows, or marshes for foraging, close to dense-topped trees for nesting and perching. Nest trees may be growing in isolation, or at the edge of or within a forest.	Coastal and valley lowlands, and cismontane regions of California.	**Could occur;** suitable habitat (open grasslands close to dense-topped trees) is present along project edges and proposed staging areas. Eight records of this species are within 3 miles of the study area (CDFW 2019).
Lanius ludovicianus (nesting)	loggerhead shrike	-	-	SSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low or sparse herbaceous cover. Prefers habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Nests in trees or shrubs, often in thorny vegetation.	Lowlands and foothills throughout California.	**Not likely to occur;** although suitable foraging habitat (open areas with perches and fencelines) is present, no records of this species are within a 9-quad area (CDFW 2019).

Laterallus jamaicensis coturniculus	California black rail	-	ST	FP	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	San Francisco Bay area, the Delta, coastal southern California at Morro Bay and a few other locations, the Salton Sea, and lower Colorado River area.	**No potential;** no suitable aquatic habitat is present.
Melospiza melodia	song sparrow – "Modesto" population	-	-	SSC	Moderately dense vegetation to supply cover for nest sites, a source of standing or running water, semi-open canopies to allow light, and exposed ground or leaf litter for foraging. Seems to prefer emergent freshwater marshes dominated by tules and cattails as well as riparian willow thickets.	Restricted to California, where it is locally numerous in the Sacramento Valley, the Delta, and northern San Joaquin Valley.	**No potential;** no suitable habitat (standing or running water) is present.
Progne subis (nesting)	purple martin	-	-	SSC	Inhabits woodlands, low-elevation coniferous forest of Douglas fir, ponderosa pine, and Monterey pine. Nests mainly in old woodpecker cavities, but also in human-made structures. Nests often are in tall, isolated trees/snags.	Eliminated from much of its previous range in California; in the Sacramento area, nests mostly within the city of Sacramento, as well as limited areas in adjacent Placer and Yolo counties.	**No potential;** no suitable habitat is present. All records of this species in Sacramento County are located in weep holes of freeway and street overpasses, which preclude competition from other bird species (CDFW 2019). The nearest record of this species is 4.5 miles to the southeast in the 1-80 overpass that crosses Roseville Road (CDFW 2019).
Riparia (nesting)	bank swallow	-	ST	-	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, and the ocean to dig nesting holes.	Riparian and other lowland habitats in California west of the deserts, during the breeding season.	**No potential;** no suitable nesting habitat (banks, cliffs) is present.
Vireo bellii pusillus (nesting)	least Bell's vireo	FE	SE	-	Rare, local, summer resident below about 2000 feet in willows and other low, dense, valley foothill riparian habitat and lower portions of canyons. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Mostly in San Benito and Monterey counties; in coastal southern California from Santa Barbara County south; and along the western edge of the deserts in desert riparian habitat.	**No potential;** no suitable riparian nesting habitat is present.

Mammals							
Taxidea taxus	American badger	-	-	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Throughout most of the state, except in the northern North Coast area	**Not likely to occur;** although suitable grassland habitat and friable soils are in the proposed staging areas, the nearest record is 13 miles to the southeast, in grazed annual grassland near the Mather Air Field (CDFW 2019).

[1] Regulatory Status Definitions:

Federal Status Categories

FE = Listed as endangered under the Federal Endangered Species Act

FT = Listed as threatened under Federal Endangered Species Act

FC = Listed as candidate under Federal Endangered Species Act

California State Status Categories

SE = Listed as endangered under California Endangered Species Act

ST = Listed as threatened under California Endangered Species Act

SC =Listed as candidate under California Endangered Species Act

California Department of Fish and Wildlife (CDFW) Categories:

SSC = Species of Special Concern

FP = Fully Protected

WL = Watch List

[2] MSL = mean sea level

[3] Potential for Occurrence:

Could Occur: The project site is within the species' range, and no occurrences of the species have been recorded within the project site; however, suitable habitat for the species is present and recorded occurrences of the species are generally present in the vicinity.

Not Likely to Occur: No occurrences of the species have been recorded within or immediately adjacent to the project site, and either habitat for the species is marginal or potentially suitable habitat may occur, but the species' current known range is restricted to areas far from the project site.

No Potential to Occur: The project site is outside the species' range or suitable habitat for the species is absent from the project site and adjacent areas.

Sources: CDFW 2019

No special-status species were detected during the biological survey conducted on August 21, 2019. Based on the results of the CNDDB search, the biological report provided by AECOM, and the IPaC results, it was determined that five special-status wildlife species could occur on the project site— vernal pool fairy shrimp, vernal pool tadpole shrimp, burrowing owl, Swainson's hawk, and white-tailed kite. These five species are discussed further below.

VERNAL POOL INVERTEBRATES

There are a variety of invertebrate species which rely on vernal pools and similar seasonal wetland habitat. Species associated with vernal pools include California linderiella, midvalley fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, and Ricksecker's water scavenger beetle. All of the these species spend their life cycle within the margins of the vernal pool. None of these species are readily observed through casual observation. Thus, lack of recorded sightings is not cause to conclude that the species is not present. If suitable habitat is present, the species should be assumed to be present unless surveys have found the species to be absent.

Discussion of the California linderiella, midvalley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp are grouped under the heading of Vernal Pool Crustaceans, because the survey protocols and mitigation requirements are applied to all four species.

VERNAL POOL CRUSTACEANS

According to the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (vernal pool recovery plan)[1], California linderiella, midvalley fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp use the same habitat types, though California linderiella tends to prefer deeper pools. The shrimp feed on algae, bacteria, protozoa, rotifers and bits of detritus.The females carry their eggs in a ventral brood sac until they are dropped to the bottom of the pool, or the mother dies and sinks. At the end of the rainy season, as the pool dries up, the eggs remain in a dormant stage in the dried pool until the rains of the next season, or other environmental stimuli cause them to hatch. Cysts will hatch when the pool refills, although not all cysts present will hatch during the following rainy season, and they may remain dormant in the soil for multiple seasons.

Survey requirements and mitigation protocols published by U.S. Fish and Wildlife Service ("Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods" published April 19, 1996 and the Programmatic Formal Endangered Species Act Consultation published on February 28, 1996) are only required by U.S. Fish and Wildlife Service for the two species listed under the ESA: vernal pool fairy shrimp and vernal pool tadpole shrimp. However, the discussions and mitigation below apply them to the two Species of Concern, California linderiella and midvalley fairy shrimp.– Surveys to determine presence or absence of the species must include either 2 years of wet season surveys completed within a 5-year period or consecutive wet season and dry season surveys. In the absence of surveys, presence should be assumed.

A U.S. Fish and Wildlife Service programmatic consultation was published for vernal pool fairy shrimp and vernal pool tadpole shrimp on February 28, 1996. Programmatic consultation can only be used by Projects involving a maximum impact of one acre; all other projects must be individually permitted through the Army Corps and the U.S. Fish and Wildlife Service, but it is reasonable to assume that vernal pool avoidance and mitigation requirements developed during the individual permitting process would be similar to those found in the programmatic consultation.

Vernal pool habitats may be subject to either direct or indirect impacts. Indirect impacts may be caused because development in proximity of a vernal pool could deliver runoff polluted with urban contaminants and introduce non-native species associated with development landscaping. Development may also reduce the size of the watershed, which supports the vernal pool, by diverting runoff which once went into the vernal pool

[1] United States Fish and Wildlife Service, "Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon", December 2005.

into a storm drainage system. This watershed reduction could cause a reduction in the depth and/or duration of ponding. Shorter inundation durations may mean a change in pool temperature, depth, and pH. Features that may have been utilized by species that required specific inundation durations for the completion of breeding cycles may no longer provide suitable habitat. The programmatic consultation indicates that all habitats within 250 feet of proposed development may be subject to indirect impacts. All development must occur a minimum of 250 feet from the margin of any vernal pool in order to achieve total avoidance of impacts, unless a lesser buffer is approved by U.S. Fish and Wildlife.

A direct impact is the filling or excavation of a vernal pool. Programmatic consultation specifies that if filling or excavation occurs within any portion of a vernal pool, the entire vernal pool should be considered directly impacted. Programmatic consultation also indicates that mitigation for direct impacts (removal of wetlands) requires both preservation of existing wetlands and creation of wetlands, at ratios that vary depending on whether the mitigation bank credits are at banks approved by U.S. Fish and Wildlife (2:1 and 1:1 preservation and creation at approved banks, and 3:1 and 2:1 preservation and creation at non-approved banks). Encroachment within the 250-foot buffer requires 2:1 preservation mitigation.

DISCUSSION OF PROJECT IMPACTS

Suitable habitat may be present in the proposed staging areas. AECOM biological staff did not have access at the time of the biological survey, so a pedestrian survey of the proposed staging areas was not conducted on these properties; however, AECOM staff noted that the southwestern most staging area at 4th Street and E Street may contain vernal pools. If the site is selected as the staging area, an aquatic resources survey/wetland delineation would be necessary to determine whether habitat is present on-site in order to avoid potential impacts to vernal pool habitat and species. If surveys detect vernal pools on-site, a 250-foot buffer shall be established to ensure take of any species does not occur.

CONCLUSION

With the implementation of the recommended mitigation measure, potential impacts to vernal pool invertebrates will be ***less than significant***.

MIGRATORY NESTING BIRDS

The Migratory Bird Treaty Act of 1918, which states "unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird. Section 3(18) of FESA defines the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Causing a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered "take." To avoid take of nesting migratory birds, minimization measures have been included to require that activities either occur outside of the nesting season, or to require that nests be buffered from construction activities until the nesting season is concluded.

DISCUSSION OF PROJECT IMPACTS

Suitable tree habitat is present throughout the project area. Preconstruction surveys will be required if work is to commence between February 1 and August 31. The purpose of the survey requirement is to ensure that construction activities do not agitate or harm nesting migratory birds, potentially resulting in nest abandonment or other harm to nesting success.

CONCLUSION

Recommended mitigation measures will ensure impacts to migratory nesting birds are ***less than significant***.

NESTING BIRDS OF PREY

This section addresses raptors which are not listed as endangered, threatened, or of special concern, but are nonetheless afforded general protections by the Fish and Game Code. Raptors and their active nests are protected by the California Fish and Game Code Section 3503.5, which states: It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey, or raptors) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. Section 3(18) of FESA defines the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Causing a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered "take." Thus, take may occur both as a result of cutting down a tree or as a result of activities nearby an active nest which cause nest abandonment.

Raptors within the Sacramento region include tree-nesting species such as the red-tailed hawk and red-shouldered hawk, as well as ground-nesting species such as the northern harrier. The following raptor species are identified as "special animals" due to concerns over nest disturbance: Cooper's hawk, sharp-shinned hawk, golden eagle, northern harrier, and white-tailed kite.

DISCUSSION OF PROJECT IMPACTS

Suitable tree habitat for nesting raptors is present within the project area. CNDDB also contains multiple recorded sightings of white-tailed kites present within the vicinity of each of the project sites. The nearest sighting occurs one mile southwest of the site.

To avoid impacts to nesting raptors, minimization measures involve pre-construction nesting surveys to identify any active nests and to implement avoidance measures if nests are found – if construction will occur during the nesting season of March 1 to September 15. The purpose of the survey requirement is to ensure that construction activities do not agitate or harm nesting raptors, potentially resulting in nest abandonment or other harm to nesting success. If nests are found, the developer is required to contact CDFW to determine what measures need to be implemented in order to ensure that nesting raptors remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of

natural screening. If no active nests are found during the focused survey, no further mitigation will be required.

CONCLUSION

Mitigation measures will ensure that impacts to nesting raptors will be ***less than significant***.

SWAINSON'S HAWK

The Swainson's hawk (Buteo swainsoni) is listed as a threatened species by the State of California and is a candidate for federal listing as threatened or endangered. It is a migratory raptor typically nesting in or near valley floor riparian habitats during spring and summer months. Swainson's hawks were once common throughout the state, but various habitat changes, including the loss of nesting habitat (trees) and the loss of foraging habitat through the conversion of native Central Valley grasslands to certain incompatible agricultural and urban uses has caused an estimated 90% decline in their population.

Swainson's hawks feed primarily upon small mammals, birds, and insects. Their typical foraging habitat includes native grasslands, alfalfa and other hay crops that provide suitable habitat for small mammals. Certain other row crops and open habitats also provide some foraging habitat. The availability of productive foraging habitat near a Swainson's hawk's nest site is a critical requirement for nesting and fledgling success. In central California, about 85% of Swainson's hawk nests are within riparian forest or remnant riparian trees. CEQA analysis of impacts to Swainson's hawks consists of separate analyses of impacts to nesting habitat and foraging habitat.

The CEQA analysis provides a means by which to ascertain impacts to the Swainson's hawk. When the analysis identifies impacts, mitigation measures are established that will reduce impacts to the species to a less than significant level. Project proponents are cautioned that the mitigation measures are designed to reduce impacts and do not constitute an incidental take permit under the California Endangered Species Act (CESA). Anyone who directly or incidentally takes a Swainson's hawk, even when in compliance with mitigation measures established pursuant to CEQA, may violate the California Endangered Species Act.

NESTING HABITAT IMPACT METHODOLOGY

For determining impacts to and establishing mitigation for nesting Swainson's hawks in Sacramento County, CDFW recommends utilizing the methodology set forth in the Recommended Timing and Methodology for Swainson's Hawk nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). The document recommends that surveys should be conducted for at least two of the survey periods immediately prior to the project's initiation. The survey periods are defined by the timing of migration, courtship, and nesting in a typical year. Surveys should extend a ½-mile radius around all project activities, and if active nesting is identified, CDFW should be contacted.

DISCUSSION OF PROJECT IMPACTS

Suitable habit is present within and adjacent to the project footprint. Additionally, CNDDB records indicate that there have been 6 Swainson's hawk sightings within a 3-mile buffer; preconstruction surveys will be required. The purpose of these surveys is to ensure that construction activities do not agitate nesting hawks, potentially resulting in nest abandonment or other harm to nesting success. If Swainson's hawk nests are found, the developer is required to contact CDFW to determine what measures need to be implemented in order to ensure that nesting hawks remain undisturbed. The measures selected will depend on many variables, including the distance of activities from the nest, the types of activities, and whether the landform between the nest and activities provides any kind of natural screening.

CONCLUSION

With the recommended mitigation measures, impacts to Swainson's hawk will be ***less than significant***.

BURROWING OWL

According to the California Fish and Wildlife life history account for the species, burrowing owl (Athene cunicularia) habitat can be found in annual and perennial grasslands, deserts, and arid scrublands characterized by low-growing vegetation. Burrows are the essential component of burrowing owl habitat. Both natural and artificial burrows provide protection, shelter, and nesting sites for burrowing owls. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but also use human-made structures such as cement culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are listed as a California Species of Special Concern due to loss of breeding habitat.

Burrowing owls may use a site for breeding, wintering, foraging, and/or migration stopovers. Breeding season is generally defined as spanning February 1 to August 31 and wintering from September 1 to January 31. Occupancy of suitable burrowing owl habitat can be verified at a site by detecting a burrowing owl, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance. Burrowing owls exhibit high site fidelity, reusing burrows year after year.

According to the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012), surveys for burrowing owl should be conducted whenever suitable habitat is present within 500 feet of a proposed impact area; this is also consistent with the "Burrowing Owl Survey Protocol and Mitigation Guidelines" published by The California Burrowing Owl Consortium (April 1993). Occupancy of burrowing owl habitat is confirmed whenever one burrowing owl or burrowing owl sign has been observed at a burrow within the last three years.

The California Fish and Wildlife Staff Report on Burrowing Owl Mitigation indicates that the impact assessment should address the factors which could impact owls, the type and duration of disturbance, the timing and duration of the impact, and the significance

of the impacts. The assessment should also take into account existing conditions, such as the visibility and likely sensitivity of the owls in question with respect to the disturbance area and any other environmental factors which may influence the degree to which an owl may be impacted (e.g. the availability of suitable habitat).

DISCUSSION OF PROJECT IMPACTS

The proposed staging areas contain annual grasslands with suitable habitat for burrowing owl. While no burrowing owls were detected during the biological survey, AECOM staff did not access to the proposed staging areas and could not definitively rule out presence. Surveys for burrowing owl will be required prior to construction in order to ensure take of the species does not occur.

CONCLUSION

With the recommended mitigation measures, impacts to burrowing owls will be ***less than significant***.

CULTURAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Have a substantial adverse effect on an archaeological resource.
- Disturb any human remains, including those interred outside of formal cemeteries.
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.

The California Environmental Quality Act (CEQA) defines cultural resources as historical and unique archaeological resources that meet significance criteria of the California Register of Historical Resources. The eligibility criteria of the California Register include the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (Public Resources Code SS5024.1, Title 14 CCR, Section 4852).

Under CEQA, lead agencies must consider the effects of their projects on cultural resources.

AB-52 CONSULTATION

Pursuant to Public Resources Code 21090.3.1(b)(1), tribal notifications were sent out to participating tribes on October 3, 2019. Correspondence sent to the tribes included a project description, non-confidential letter with from the California Historical Resources Information System's Northern Central Information Center indicating that the project area is not sensitive with respect to cultural resources, and supporting map graphics. Written correspondence was received from Wilton Rancheria (Wilton) and the United Auburn Indian Community (UAIC).

PER received written correspondence from Wilton Rancheria on October 3, 2019. Wilton identified the project area as sensitive and requested further consultation regarding cultural resource sensitivity and mitigation measures. In a later conference call, on November 20, 2019, Wilton disclosed that their records indicate known sites containing cultural resources in the near vicinity of the project area and requested that a paid tribal monitor be present to spot check stockpiled spoils from the HDD construction method. If the open cut trenching method is used, they requested that a paid tribal monitor be present during all trenching activity. Additionally, Wilton requested that a cultural resources worker awareness brochure be distributed to all construction personnel.

A response from UAIC was received on October 14, 2019. UAIC stated that their records indicated that the project area is not likely to affect tribal or cultural resources that may be of importance to UAIC. UAIC did not request consultation under AB-52; instead, they requested that they receive a copy of the draft CEQA document for opportunity to comment on potential impacts and proposed mitigation measures related to cultural resources.

CONCLUSION

With the recommended mitigation, potential impacts to cultural resources will be ***less than significant***.

ENVIRONMENTAL MITIGATION MEASURES

MITIGATION MEASURE A: AQUATIC RESOURCES INVENTORY

The applicant will be required to conduct an aquatic resources delineation to determine exact locations and extents of wetlands and any other jurisdictional water bodies. If jurisdictional water bodies are identified, avoidance buffers shall be established in order to avoid indirect and direct impacts to the feature.

MITIGATION MEASURE B: MIGRATORY BIRD NEST PROTECTION

To avoid impacts to nesting migratory birds the following shall apply:

1. If construction activity (which includes clearing, grubbing, or grading) is to commence within 50 feet of nesting habitat between February 1 and August 31, a survey for active migratory bird nests shall be conducted no more than 14 day prior to construction by a qualified biologist.

2. Trees slated for removal shall be removed during the period of September through January, in order to avoid the nesting season. Any trees that are to be removed during the nesting season, which is February through August, shall be surveyed by a qualified biologist and will only be removed if no nesting migratory birds are found.

3. If active nest(s) are found in the survey area, a non-disturbance buffer, the size of which has been determined by a qualified biologist, shall be established and maintained around the nest to prevent nest failure. All construction activities shall be avoided within this buffer area until a qualified biologist determines that nestlings have fledged, or until September 1.

MITIGATION MEASURE C: VERNAL POOL CRUSTACEANS

Presence of listed vernal pool crustaceans shall be assumed unless determinate surveys that comply with the U.S. Fish and Wildlife protocol "Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods" (published April 19, 1996) conclude that the species is absent. In order to reduce impacts to listed vernal pool branchiopods and wetland habitat the applicant shall comply with one or a combination of the following:

1. *Total Avoidance: Species is present or assumed to be present.* Unless a smaller buffer is approved through formal consultation with the U.S. Fish and Wildlife, construction fencing shall be installed a minimum of 250 feet from the delineated wetland margin. All construction activities are prohibited within this buffer area. If total avoidance is achieved, no further action is required.

2. Compensate for habitat removed. Mitigate for all vernal pools consistent with the Programmatic Formal Endangered Species Act Consultation published on February 28, 1996 for vernal pool branchiopods, if the project qualifies. Also, obtain all applicable permits from the U.S. Fish and Wildlife, U.S. Army Corps of Engineers, California Fish and Wildlife, and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site wetlands and mitigate for habitat loss in accordance with the published regulatory guidelines.

MITIGATION MEASURE D: BURROWING OWL

Prior to the commencement of construction activities (which includes clearing, grubbing, or grading) within 500 feet of suitable burrow habitat, a survey for burrowing owl shall be conducted by a qualified biologist. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. Surveys shall be conducted in accordance with the following:

1. A survey for-burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (~500 feet) of the project impact zone.

2. Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (~100 feet), and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (~160 feet) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.

3. If no occupied burrows or burrowing owls are found in the survey area, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator and no further mitigation is necessary.

4. If occupied burrows or burrowing owls are found, then a complete burrowing owl survey is required. This consists of a minimum of four site visits conducted on four separate days, which must also be consistent with the Survey Method, Weather Conditions, and Time of Day sections of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012). Submit a survey report to the Environmental Coordinator which is consistent with the Survey Report section of Appendix D of the California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012).

If occupied burrows or burrowing owls are found the applicant shall contact the Environmental Coordinator and consult with California Fish and Wildlife prior to construction, and will be required to submit a Burrowing Owl Mitigation Plan (subject to the approval of the Environmental Coordinator and in consultation with California Fish and Wildlife). This plan must document all proposed measures, including avoidance, minimization, exclusion, relocation, or other measures, and include a plan to monitor mitigation success. The California Fish and Wildlife "Staff Report on Burrowing Owl Mitigation" (March 2012) should be used in the development of the mitigation plan.

MITIGATION MEASURE E: RAPTOR NEST PROTECTION

If construction activity (which includes clearing, grubbing, or grading) is to commence within 500 feet of suitable nesting habitat between March 1 and September 15, a survey for raptor nests shall be conducted by a qualified biologist. The survey shall cover all

potential tree and ground-nesting habitat on-site and off-site up to a distance of 500 feet from the project boundary. The survey shall occur within 30 days of the date that construction will encroach within 500 feet of suitable habitat. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Environmental Coordinator prior to ground disturbing activity. If no active nests are found during the survey, no further mitigation will be required. If any active nests are found, the Environmental Coordinator and CDFW shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction within 500 feet of an identified nest.

MITIGATION MEASURE F: SWAINSON'S HAWK NESTING HABITAT

If construction, grading, or project-related improvements are to commence between March 1 and September 15, focused surveys for Swainson's hawk nests shall be conducted by a qualified biologist within a ½-mile radius of project activities, in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk TAC 2000). To meet the minimum level of protection for the species, surveys should be completed for at least two survey periods immediately prior to commencement of construction activities (including clearing and grubbing). If active nests are found, CDFW shall be contacted to determine appropriate protective measures, and these measures shall be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, no further mitigation will be required.

MITIGATION MEASURE G: CULTURAL RESOURCES AWARENESS TRAINING

A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation will be developed in coordination with interested Native American Tribes. The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists, Native American Representatives, and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.

MITIGATION MEASURE H: INADVERTENT DISCOVERIES

If potential tribal cultural resources (TCRs), archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, work will cease within 100 feet of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from a traditionally and culturally affiliated Native American Tribe is present. The Office of Planning and Environmental Review shall be immediately notified at (916) 874-6141. A qualified cultural resources specialist and Native American Representatives and Monitors from traditionally and culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project area where they will not be subject to future impacts. The Tribe does not consider curation of TCRs to be appropriate or respectful and request that materials not be permanently curated, unless requested by the Tribe.

Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. These recommendations will be documented in the project record. For any recommendations made by traditionally and culturally affiliated Native American Tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with UAIC, Wilton Rancheria, Ione Band of Miwoks, and other traditionally and culturally affiliated Native American Tribes regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner and Office of Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

MITIGATION MEASURE I: TRIBAL MONITOR

To minimize the potential for destruction of or damage to existing or previously undiscovered archaeological and cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities, the project proponent and its construction contractor(s) will implement the following measures:

A paid Native American Monitors from culturally affiliated with Wilton Rancheria will be invited to monitor ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American Representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any or ground-disturbing activities begin.

- **Open cut trenching**: if open cut trenching is to be utilized as a construction method, a tribal monitor will be present for all ground-disturbing activities.

- **Hydraulic direction drilling (HDD)**: if HDD is to be utilized, a tribal monitor will be invited to spot check stockpiled spoil piles, prior to their removal from the site.

MITIGATION MEASURE COMPLIANCE [PUBLIC]

Comply with the Mitigation Monitoring and Reporting Program for this project, including the payment of 100% of the Office of Planning and Environmental Review staff costs, and the costs of any technical consultant services incurred during implementation of that Program.

INITIAL STUDY CHECKLIST

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed the following Initial Study Checklist. The Checklist identifies a range of potential significant effects by topical area. The words "significant" and "significance" used throughout the following checklist are related to impacts as defined by the California Environmental Quality Act as follows:

1 Potentially Significant indicates there is substantial evidence that an effect MAY be significant. If there are one or more "Potentially Significant" entries an Environmental Impact Report (EIR) is required. Further research of a potentially significant impact may reveal that the impact is actually less than significant or less than significant with mitigation.

2 Less than Significant with Mitigation applies where an impact could be significant but specific mitigation has been identified that reduces the impact to a less than significant level.

3 Less than Significant or No Impact indicates that either a project will have an impact but the impact is considered minor or that a project does not impact the particular resource.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
1. **LAND USE** - Would the project:					
a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to a general plan, specific plan or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X		The project is consistent with environmental policies of the Sacramento County General Plan, Rio Linda/Elverta Community Plan, and Sacramento County Zoning Code. Additionally, the project area is located within the county's Urban Services Boundary and Urban Policy Area.
b. Physically disrupt or divide an established community?				X	The project will not create physical barriers that substantially limit movement within or through the community.
2. **POPULATION/HOUSING** - Would the project:					
a. Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of infrastructure)?			X		The proposed infrastructure project is intended to service existing development and will not induce substantial unplanned population growth.
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?				X	The project will not result in the removal of existing housing, and thus will not displace substantial amounts of existing housing.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
3. **AGRICULTURAL RESOURCES** - Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance or areas containing prime soils to uses not conducive to agricultural production?				X	The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the current Sacramento County Important Farmland Map published by the California Department of Conservation. The site does not contain prime soils. With the exception of slight portion of the easement area being designated as "Grazing", the majority of the project area is designated as "Urban and Built-Up Land" on Sacramento County Important Farmland Map published by CA Dept. of Conservation.
b. Conflict with any existing Williamson Act contract?				X	No Williamson Act contracts apply to the project site.
c. Introduce incompatible uses in the vicinity of existing agricultural uses?			X		Though in an area where agricultural uses occur, the project will not substantially interfere with agricultural operations as the majority of the project occurs within the county right-of-way. A slight portion of the construction would occur in in an area designated as "Grazing", but would only temporarily impact the property as the line would be located below the surface.
4. **AESTHETICS** - Would the project:					
a. Substantially alter existing viewsheds such as scenic highways, corridors or vistas?				X	The project does not occur in the vicinity of any scenic highways, corridors, or vistas.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Substantially degrade the existing visual character or quality of the site and its surroundings?			X		Construction will not substantially degrade the visual character or quality of the project site. It is acknowledged that aesthetic impacts are subjective and may be perceived differently by various affected individuals. Nonetheless, given the urbanized environment in which the project is proposed, it is concluded that the project would not substantially degrade the visual character or quality of the project site or vicinity.
c. Create a new source of substantial light, glare, or shadow that would result in safety hazards or adversely affect day or nighttime views in the area?				X	The project will not result in a new source of substantial light, glare or shadow that would result in safety hazards or adversely affect day or nighttime views in the area.
5. **AIRPORTS** - Would the project:					
a. Result in a safety hazard for people residing or working in the vicinity of an airport/airstrip?				X	The project occurs outside of any identified public or private airport/airstrip safety zones.
b. Expose people residing or working in the project area to aircraft noise levels in excess of applicable standards?				X	The project occurs outside of any identified public or private airport/airstrip noise zones or contours.
c. Result in a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft?				X	The project does not affect navigable airspace.
d. 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?				X	The project does not involve or affect air traffic movement.
6. **PUBLIC SERVICES** - Would the project:					
a. Have an adequate water supply for full buildout of the project?				X	The project will not result in increased demand for water supply.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Have adequate wastewater treatment and disposal facilities for full buildout of the project?			X		The Sacramento Regional County Sanitation District has adequate wastewater treatment and disposal capacity to service the proposed project. Refer to the Public Services discussion in the Environmental Effects section above.
c. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X	The Kiefer Landfill has capacity to accommodate solid waste until the year 2050.
d. Result in substantial adverse physical impacts associated with the construction of new water supply or wastewater treatment and disposal facilities or expansion of existing facilities?			X		Minor extension of infrastructure would be necessary to serve the proposed project. Existing service lines are located within existing roadways and other developed areas, and the extension of lines would take place within areas already proposed for development as part of the project. No significant new impacts would result from service line extension.
e. Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?				X	Project construction would not require the addition of new stormwater drainage facilities.
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?				X	The project will not require electric or natural gas service.
g. Result in substantial adverse physical impacts associated with the provision of emergency services?				X	The project would incrementally increase demand for emergency services, but would not cause substantial adverse physical impacts as a result of providing adequate service.
h. Result in substantial adverse physical impacts associated with the provision of public school services?				X	The project will not require the use of public school services.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
i. Result in substantial adverse physical impacts associated with the provision of park and recreation services?				X	The project will not require park and recreation services.
7. **TRANSPORTATION/TRAFFIC** - Would the project:					
a. Result in a substantial increase in vehicle trips that would exceed, either individually or cumulatively, a level of service standard established by the County?				X	The project will not increase vehicle trips.
b. Result in a substantial adverse impact to access and/or circulation?			X		No changes to existing access and/or circulation patterns would occur as a result of the project. The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are less than significant.
c. Result in a substantial adverse impact to public safety on area roadways?			X		No changes to existing access and/or circulation patterns would occur as a result of the project; therefore no impacts to public safety on area roadways will result. The project will be required to comply with applicable access and circulation requirements of the County Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are less than significant.
d. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X	The project does not conflict with alternative transportation policies of the Sacramento County General Plan, with the Sacramento Regional Transit Master Plan, or other adopted policies, plans or programs supporting alternative transportation.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
8. **AIR QUALITY** - Would the project:					
a. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			X		The project does not exceed the screening thresholds established by the Sacramento Metropolitan Air Quality Management District (SMAQMD) and will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. Compliance with existing dust abatement rules and standard construction mitigation for vehicle particulates will ensure that construction air quality impacts are less than significant. SMAQMD's Roadway Construction Emissions Model was used to analyze ozone precursor emissions; the project will not result in emissions that exceed standards. Please see the Air Quality section of this document.
b. Expose sensitive receptors to pollutant concentrations in excess of standards?			X		There are no sensitive receptors (i.e., schools, nursing homes, hospitals, daycare centers, etc.) adjacent to the project site. See Response 8.a.
c. Create objectionable odors affecting a substantial number of people?			X		The project will not generate objectionable odors. The project could result in occasional or periodic odors. Refer to the Initial Study.
9. **NOISE** - Would the project:					
a. Result in exposure of persons to, or generation of, noise levels in excess of standards established by the local general plan, noise ordinance or applicable standards of other agencies?			X		The project is not in the vicinity of any uses that generate substantial noise, nor will the completed project generate substantial noise. The project will not result in exposure of persons to, or generation of, noise levels in excess of applicable standards.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Result in a substantial temporary increase in ambient noise levels in the project vicinity?			X		Project construction will result in a temporary increase in ambient noise levels in the project vicinity. This impact is less than significant due to the temporary nature of the these activities, limits on the duration of noise, and evening and nighttime restrictions imposed by the County Noise Ordinance (Chapter 6.68 of the County Code).
10. **HYDROLOGY AND WATER QUALITY** - Would the project:					
a. Substantially deplete groundwater supplies or substantially interfere with groundwater recharge?				X	The project will not rely on groundwater supplies and will not substantially interfere with groundwater recharge.
b. Substantially alter the existing drainage pattern of the project area and/or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?				X	The project does not involve any modifications that would substantially alter the existing drainage pattern and or/increase the rate or amount of surface runoff in a manner that would lead to flooding. Compliance with applicable requirements of the Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standards will ensure that impacts are less than significant.
c. Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area?				X	The project is not within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map, nor is the project within a local flood hazard area.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?				X	The project site is not within a 100-year floodplain.
e. Develop in an area that is subject to 200 year urban levels of flood protection (ULOP)?				X	The project is not located in an area subject to 200-year urban levels of flood protection (ULOP).

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
f. Expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X	The project will not expose people or structures to a substantial risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.
g. Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems?				X	The project does not propose any physical changes that would affect runoff from the site. Adequate on- and/or off-site drainage improvements will be required pursuant to the Sacramento County Floodplain Management Ordinance and Improvement Standards.
h. Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality?			X		Compliance with the Stormwater Ordinance and Land Grading and Erosion Control Ordinance (Chapters 15.12 and 14.44 of the County Code respectively) will ensure that the project will not create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality. All underground storage tanks are subject to federal and State regulations pertaining to operating standards, leak reporting requirements, and corrective action requirements. The County Environmental Management Department enforces these regulations. Existing regulations will ensure that impacts are less than significant. Sacramento County Code Chapters 6.28 and 6.32 provide rules and regulations for water wells and septic systems that are designed to protect water quality. The Environmental Health Division of the County Environmental Management Department has permit approval authority for any new water wells and septic systems on the site. Compliance with existing regulations will ensure that impacts are less than significant.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
11. **GEOLOGY AND SOILS** - Would the project:					
a. Expose people or structures to substantial risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?				X	Sacramento County is not within an Alquist-Priolo Earthquake Fault Zone. Although there are no known active earthquake faults in the project area, the site could be subject to some ground shaking from regional faults. The Uniform Building Code contains applicable construction regulations for earthquake safety that will ensure less than significant impacts.
b. Result in substantial soil erosion, siltation or loss of topsoil?			X		Compliance with the County's Land Grading and Erosion Control Ordinance will reduce the amount of construction site erosion and minimize water quality degradation by providing stabilization and protection of disturbed areas, and by controlling the runoff of sediment and other pollutants during the course of construction. Refer to the Geology and Soils discussion in the Environmental Effects section above. Mitigation has been included to ensure that impacts are less than significant.
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, soil expansion, liquefaction or collapse?				X	The project is not located on an unstable geologic or soil unit. Pursuant to Title 16 of the Sacramento County Code and the Uniform Building Code, a soils report will be required prior to building construction. If the soils report indicates than soils may be unstable for building construction then site-specific measures (e.g., special engineering design or soil replacement) must be incorporated to ensure that soil conditions will be satisfactory for the proposed construction.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available?			X		A public sewer system is available to serve the project. All septic systems must comply with the requirements of the County Environmental Management Department, Environmental Health Division, as set forth in Chapter 6.32 of the County Code. Compliance with County standards will ensure impacts are less than significant.
e. Result in a substantial loss of an important mineral resource?				X	The project is not located within an Aggregate Resource Area as identified by the Sacramento County General Plan Land Use Diagram, nor are any important mineral resources known to be located on the project site. Although located in an area with known mineral resources, the proposed project would not significantly impact future use of important mineral resources located on site.
f. Directly or indirectly destroy a unique paleontological resource or site?					No known paleontological resources (e.g. fossil remains) or sites occur at the project location.
12. **BIOLOGICAL RESOURCES** - Would the project:					
a. Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community?			X		No substantial adverse effect on any special status species will occur. Please refer to the Biological resources section.
b. Have a substantial adverse effect on riparian habitat or other sensitive natural communities?			X		No sensitive natural communities occur on the project site, nor is the project expected to affect natural communities off-site.
c. Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies?			X		No protected surface waters are known to exist located on or adjacent to the project site; however, mitigation has been included to require an aquatic resource inventory prior to construction. Refer to the Biological Resources discussion in the Environmental Effects section above.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
d. Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species?			X		The project site is already developed. Project implementation would not affect native resident or migratory species.
e. Adversely affect or result in the removal of native or landmark trees?				X	Native trees occur adjacent to the project site, but are located on private property outside of the project area and will not be affected by the project.
f. Conflict with any local policies or ordinances protecting biological resources?			X		The project is consistent with local policies/ordinances protecting biological resources.
g. Conflict with the provisions of an adopted Habitat Conservation Plan or other approved local, regional, state or federal plan for the conservation of habitat?			X		There are no known conflicts with any approved plan for the conservation of habitat.
13. **CULTURAL RESOURCES** - Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource?				X	No historical resources would be affected by the proposed project. The project would convert the septic to sewer below ground and therefore have no potential to directly or indirectly affect any historic-age structures or resources.
b. Have a substantial adverse effect on an archaeological resource?			X		No known archaeological resources occur on-site. Refer to Cultural Resources section.
c. Disturb any human remains, including those interred outside of formal cemeteries?			X		The project site is located outside any area considered sensitive for the existence of undiscovered human remains. No known human remains exist on the project site. Nonetheless, mitigation has been recommended to ensure appropriate treatment should remains be uncovered during project implementation.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
d. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?			X		Notification pursuant to Public Resources Code 21080.3.1(b) was provided to the tribes and one request for consultation was received. Refer to the Cultural Resources section of the Initial Study.
14. **HAZARDS AND HAZARDOUS MATERIALS** - Would the project:					
a. Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X	The project does not involve the transport, use, and/or disposal of hazardous material.
b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?				X	The project does not involve the transport, use, and/or disposal of hazardous material.
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?				X	The project does not involve the use or handling of hazardous material.
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in a substantial hazard to the public or the environment?				X	The project is not located on a known hazardous materials site.
e. Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?			X		The project would not interfere with any known emergency response or evacuation plan.
f. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to or intermixed with urbanized areas?				X	The project is within the Local Responsibility Area of the unincorporated County. The project involves the construction of a gravity sewer collector line; there is no significant risk of loss, injury, or death to people or structures associated with wildland fires.

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
15. GREENHOUSE GAS EMISSIONS – Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				X	The project will not have the potential to interfere with the County meeting the goals of AB 32 (reducing greenhouse gas emissions to 1990 levels by 2020); therefore, the climate change impact of the project is considered less than significant.

SUPPLEMENTAL INFORMATION

LAND USE CONSISTENCY	Current Land Use Designation	Consistent	Not Consistent	Comments
General Plan	Low Density Residential	X		
Community Plan	Res Density 5	X		Rio Linda/Elverta Community Plan
Land Use Zone	RD-5 & AR-2	X		

INITIAL STUDY PREPARERS

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