NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION

NOTICE is hereby given that the City of Rancho Cordova, State of California intends to adopt a Mitigated Negative Declaration for the project described below.

TITLE:
White Rock Road Improvements

CONTROL NUMBER:
2009-70081

LOCATION:
The proposed project is located along the existing alignment of White Rock Road from Sunrise Boulevard to the eastern limit of the City of Rancho Cordova.

APN:
Various

GENERAL DESCRIPTION:

The project proposes to restripe White Rock Road on the exiting 6-lane portion from Sunrise Boulevard to Luyung Drive. From Luyung Drive to the eastern City limits of Rancho Cordova (near Nimbus Road) White Rock Road will be widened from two to four lanes. The purpose of this work is to reduce the existing bottleneck at Sunrise Boulevard, where White Rock Road is already six lanes west of Sunrise Boulevard, but only two lanes east of Sunrise Boulevard. This widening project will tie in to Sacramento County's widening of White Rock Road from the City Limits of Rancho Cordova to the Sacramento/El Dorado County line.

The project will realign Nimbus Road beginning approximately 800 feet north of White Rock Road. The new intersections of White Rock Road and Nimbus Road will be located approximately 450 feet east of the current intersection. The project will also widen the intersection of Fitzgerald Road–Sunrise Park Drive and White Rock Road to four lanes and add a westbound left turn lane at this intersection. Buildout of the project includes a four-lane configuration (two 12-foot wide lanes each direction) with a 14-foot wide median, two 6-foot wide bike lanes, and two 3-foot wide shoulders.

The project will construct one half of the project while maintaining traffic and then shift traffic to complete the other half of project construction.

REVIEW:
The review period for the Mitigated Negative Declaration begins on November 12, 2010 and ends on December 13, 2010. The Mitigated Negative Declaration may be reviewed at the following location:

City of Rancho Cordova
Planning Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670
(916) 851-8758

Comments regarding the Mitigated Negative Declaration should be directed to the City of Rancho Cordova Environmental Coordinator and mailed to 2729 Prospect Park Drive, Rancho Cordova, California, 95670. Failure to do so will not preclude your right to testify at a future public hearing for the proposed project. The date, time, and place of the public hearing are presently unknown. A notice providing the date, time, and place of the public hearing will be provided by the hearing body authorized to conduct the public hearing for the proposed project.

INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: 2009-70081

NAME: WHITE ROCK ROAD IMPROVEMENTS

LOCATION: The project is located along White Rock Road between Sunrise Boulevard and the eastern limits of the City of Rancho Cordova (near Nimbus Road) (Plate IS-1 and Plate IS-2).

ASSESSOR'S PARCEL NUMBERS: 072-0231-071, 072-0231-108, 072-0231-109, 072-0231-110, 072-0231-011, 072-0231-012, 072-0231-113, 072-0231-114, 072-0231-115, 072-0231-116, and 072-0231-071, 072-0370-0101, 072-0530-0008, 072-0530-0007, 072-0520-0004, 072-0231-0045, 072-0450-0072, 072-1200-0001, 072-1200-0011, 072-0340-0033, and 072-0340-0057

APPLICANT:

City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Attn: Mark Thomas

PROJECT DESCRIPTION

The project proposes to restripe White Rock Road on the exiting 6-lane portion from Sunrise Boulevard to Luyung Drive. From Luyung Drive to the eastern City limits of Rancho Cordova (near Nimbus Road) White Rock Road will be widened from two to four lanes (Plate IS-3). The purpose of this work is to reduce the existing bottleneck at Sunrise Boulevard, where White Rock Road is already six lanes west of Sunrise Boulevard, but only two lanes east of Sunrise Boulevard. This widening project will tie in to Sacramento County's widening of White Rock Road from the City Limits of Rancho Cordova to the Sacramento/El Dorado County line.

Plate IS-1: Regional Project Location

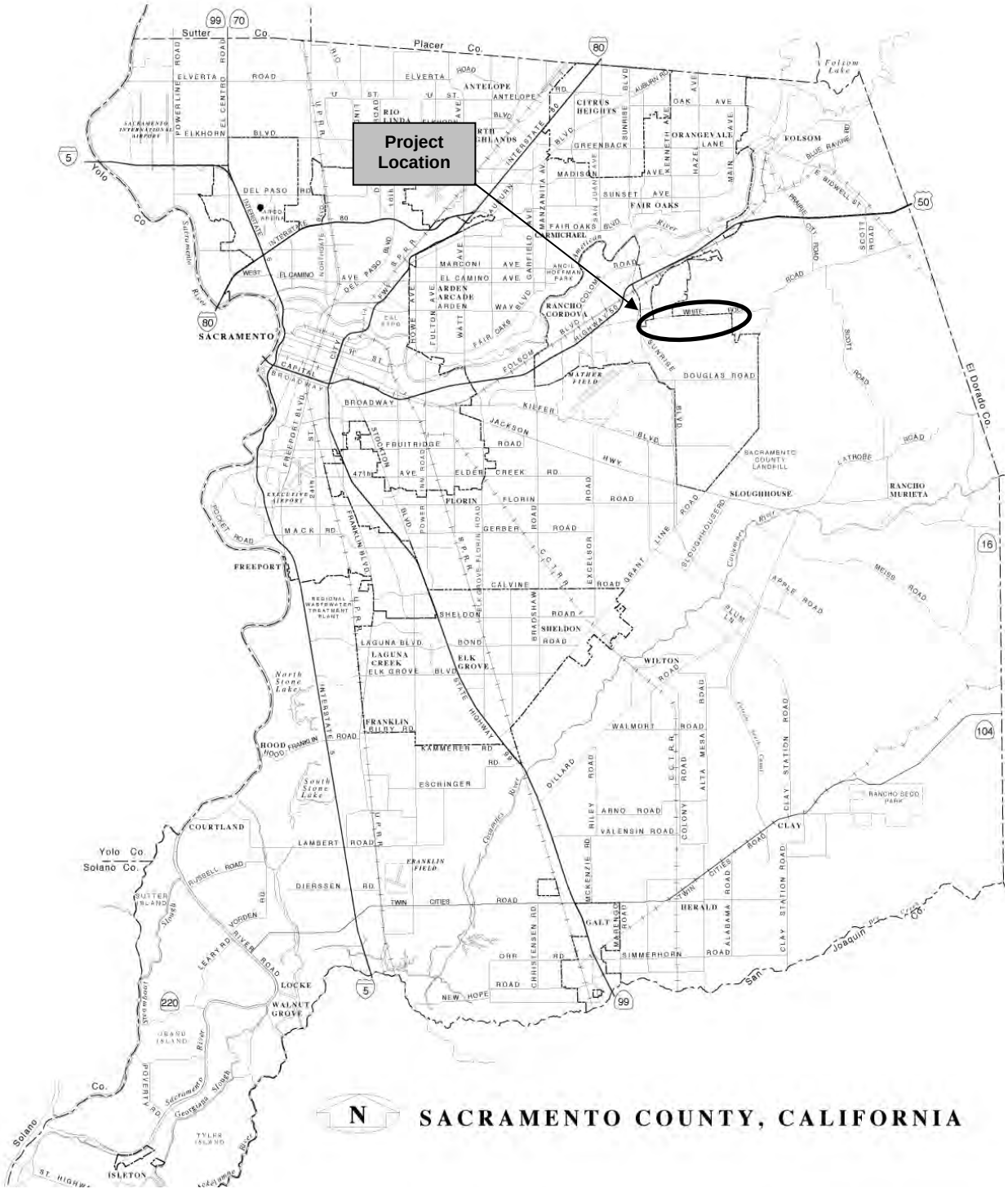


Plate IS-2: Project Location Aerial Photo

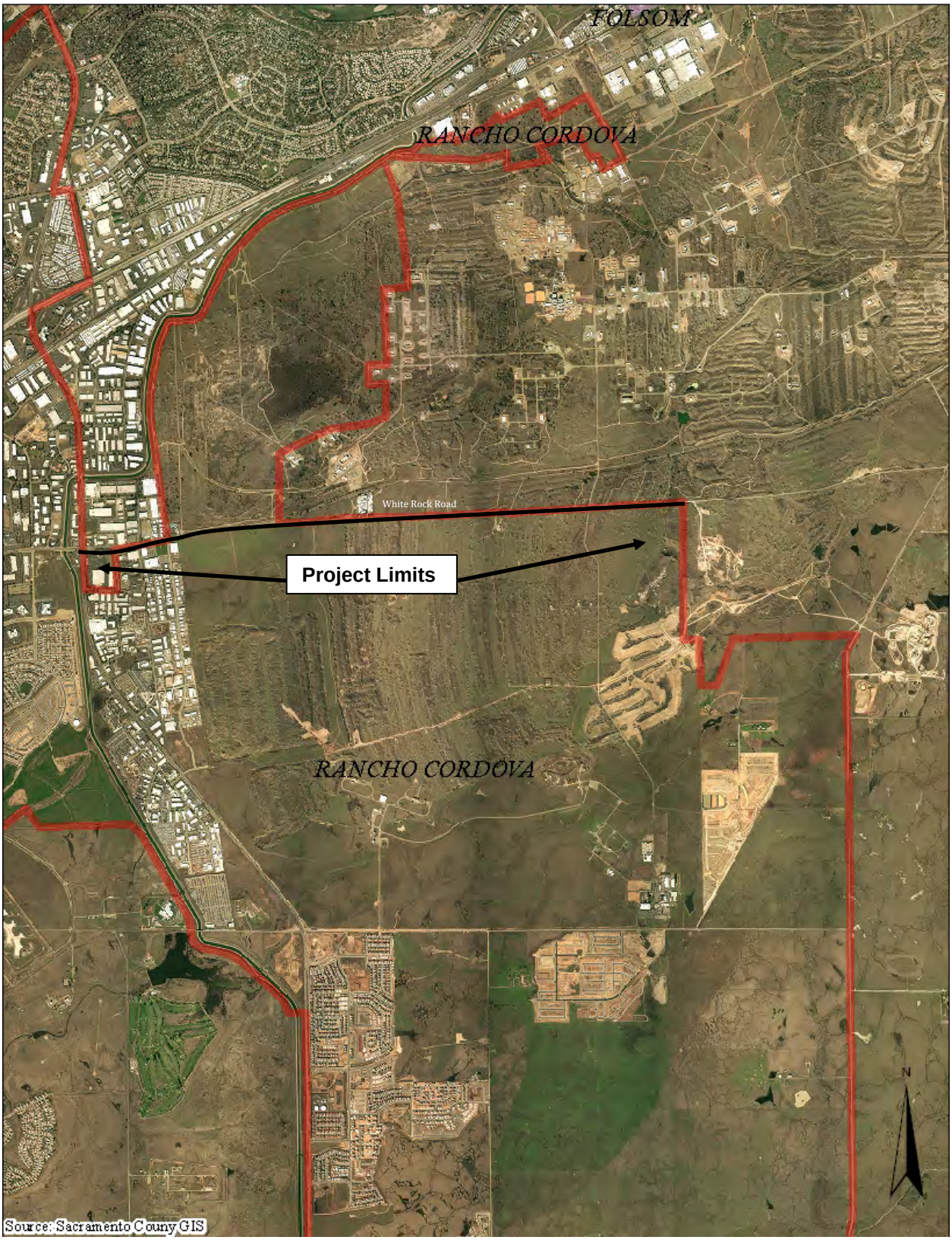


Plate IS-3: Construction Limits and Area of Potential Effects

The project will realign Nimbus Road beginning approximately 800 feet north of White Rock Road. The new intersections of White Rock Road and Nimbus Road will be located approximately 450 feet east of the current intersection. The project will also widen the intersection of Fitzgerald Road – Sunrise Park Drive and White Rock Road to four lanes and add a westbound left turn lane at this intersection. Buildout of the project includes a four-lane configuration (two 12-foot wide lanes each direction) with a 14-foot wide median, two 6-foot wide bike lanes, and two 3-foot wide shoulders.

The project will construct one half of the project while maintaining traffic and then shift traffic to complete the other half of project construction.

ENVIRONMENTAL SETTING

The project is located on White Rock Road between Sunrise Boulevard and the eastern limit of the City of Rancho Cordova, within the City of Rancho Cordova, and within the northeastern portion of Sacramento County.

White Rock Road extends from International Drive to the El Dorado County Line. Between International Drive and Zinfandel Drive it is a two-lane local road, between Zinfandel Drive and Sunrise Boulevard it is a six-lane secondary road, and east of Sunrise Boulevard it is a two-lane road. Starting at approximately one mile east of Luyung Drive and ending at the City limit the southern portion of White Rock Road is within the City of Rancho Cordova while the northern portion is within Sacramento County. With the exception of this section the western portion of White Rock Road is entirely within the City of Rancho Cordova and the eastern portion is entirely within Sacramento County.

White Rock Road is part of the Capitol SouthEast Connector, formerly known as the Elk Grove – Rancho Cordova – El Dorado Connector. The Connector is planned to be a high capacity, high speed, multi-lane and limited access regional roadway connecting the City of Elk Grove, Sacramento County, the City of Rancho Cordova, the City of Folsom, and El Dorado County. The proposed White Rock Road Improvement Project is one of the “Priority Improvements” recommended by the 50 Corridor Mobility Partnership to be implemented by 2012 to keep pace with planned development in the area south of US 50 and east of Sunrise Boulevard.

Existing development adjacent to and within the vicinity of the project portion of White Rock Road is generally sparse. The western portion of the project between Sunrise Boulevard and Luyung Drive is developed with industrial uses. From Luyung Drive to the City limits is mostly undeveloped with only a couple of existing commercial facilities along the road. Though the area is currently undeveloped there are noteworthy approved and pending projects nearby which will add residential development adjacent to White Rock Road and within the general area (Rio del Oro, Easton, and the Folsom SOI).

Properties within the vicinity of the project are relatively undisturbed, fallow native lands, historically gold-dredged lands with remnant tailings mounds, low-intensity agricultural lands (mainly non-irrigated grazing lands), and rural residential or ranching-related homes. Vegetation adjacent to the project includes annual grasslands, trees, and shrubs including oak trees and elderberry shrubs. Vernal pools and wetlands are located adjacent to the northern and southern sides of the roadway.

EXISTING DOCUMENTS

The following documents were used in the preparation of this Initial Study and are hereby incorporated by reference. These documents are available for review at 827 7th Street, Suite 220, Sacramento CA 95814 and/or 2729 Prospect Drive, Rancho Cordova, CA 95670.

City of Rancho Cordova. 2006. *Rancho Cordova General Plan*. Adopted June 2006. Rancho Cordova, CA.

City of Rancho Cordova. 2006. *Final Environmental Impact Report for Rancho Cordova General Plan*. Adopted June 2006. Rancho Cordova, CA.

County of Sacramento. 2009. *White Rock Road Widening Project 2006-PWE-GPB-0901*. Adopted April 2009. Sacramento, CA.

County of Sacramento. 1993. *County of Sacramento General Plan*. Adopted December 1993. Sacramento, CA.

City of Rancho Cordova. 2010. *Rio Del Oro Specific Plan*. Adopted August 2010. Rancho Cordova, CA.

City of Rancho Cordova. 2010. *Final Environmental Impact Report/Environmental Impact Statement Rio Del Oro Specific Plan Project*. Adopted August 2010. Rancho Cordova, CA.

ENVIRONMENTAL EFFECTS

See the Initial Study Checklist attached to this report and the following discussion.

LAND USE

This section discusses the right-of-way acquisition required for project implementation and evaluates the project's consistency with local and county designations for transportation use of White Rock Road within the project vicinity.

CITY OF RANCHO CORDOVA

The City's Circulation Element Circulation Plan designates White Rock Road as a six-lane limited access expressway from Sunrise Boulevard to Prairie City Road. The Bikeway and Trail Plan identifies the project corridor with a Class II Bike Lane, with the exception of a segment east of the Glenborough Planning Area, and also identifies a grade separated crossing at the west end of the trail segment. The City's Transit System Map designates the entire corridor for Bus Rapid Transit (BRT) and a future Transit Station is identified at the intersection of White Rock Road and Grant Line Road.

CORDOVA COMMUNITY PLAN AREA

The Cordova Community Plan Transportation and Circulation "Corridor Visioning" section (pp. 6-5) identifies White Rock Road for development as a county "Thoroughfare" with six lanes and a 108-foot right-of-way. The plan also includes the following vision statements for the project corridor within the community plan area:

- Posted traffic speed: 45-55 mph
- Construct BRT in center landscaped median with connections to new LRT station
- Might function similar to Laguna Boulevard with walls, separated sidewalks, and wide landscaped corridors
- Extend eastward
- Dependent on Aerojet development and on mining reclamation; may change character
- Limited access needed

The plan further notes that several new roadways will eventually be developed in the Cordova Community Plan area. Many of these future roads are shown on the 1993 County General Plan Transportation Diagram. The future County General Plan roadways expected to cross White Rock Road within the community plan area include the "Alta Sunrise Boulevard (Thoroughfare)", located east of Sunrise Boulevard, and the "Hazel Avenue/Grant Line Road Connector (Thoroughfare)", located east of the Rancho Cordova City Limits.

The Cordova Community Plan's stated transportation and circulation goal is [to] "Provide for the safe, convenient, and efficient movement of people to and through the community using various forms of transportation (of equal importance); including, but not limited to, personal vehicles, buses, LRT, bicycles, and walking, while minimizing adverse impacts to neighborhoods."

SACRAMENTO COUNTY GENERAL PLAN

The 1993 General Plan Transportation Plan designation for White Rock Road from Sunrise Boulevard to about 3,000 feet west of Grant Line Road is "Post-2010" Thoroughfare (Normal Width 108 feet, Normally 6 lanes). The designation for this section of White Rock Road was changed to "Pre-2010" Thoroughfare (Normal Width 108 feet, Normally six lanes) as part of the *White Rock Road General Plan Amendment & Widening Project, Sacramento County Control Number 06-GPB-PWE-0901*.

The General Plan Update Transportation Plan designation for White Rock Road is "Pre-2030" Thoroughfare from Sunrise Boulevard to about 3,000 feet west of Grant Line Road.

RIGHT-OF-WAY ACQUISITION

The project would require some land acquisition for right-of-way (ROW) easements. A list of parcels affected and the amounts of ROW required from each parcel is presented in Table IS-1 below.

Compensation for right-of-way acquisition is typically carried out during the appraisal and compensation negotiations between the City and individual property owners. Property owners will be notified of the City's intent to purchase right-of-way. Property owners are entitled to fair compensation for there property and may negotiate with the City until an agreed market value it determined.

If an agreement cannot be reached, the City may file a condemnation action in court, exercising the government's right of eminent domain as provided by the Constitution. In such a case the court hears testimony relative to the value of the lands and the easement that the City wishes to acquire, and determines, based on evidence presented by the City and the property owner, what is fair compensation. Either party may appeal the judge's decision if they are dissatisfied with the compensation awarded.

Table IS-1: Estimated Rights-of-Way

APN	Parcel Owner	Total Parcel Area (ft^2)	ROW Area (ft^2)
072-0231-135	Aerojet General Corp.	45,200,905	3,186
072-0231-108	Aerojet General Corp.	158,558	70,561
072-0231-109	Aerojet General Corp.	193,842	18,333
072-0231-110	Aerojet General Corp.	202,554	2,282
072-0231-113	Aerojet General Corp.	413,820	3
072-0231-114	Aerojet General Corp.	415,127	1,360
072-0231-115	Easton Development Co.	412,949	3,966
072-0231-116	Easton Development Co.	114,869,462	8,332
072-0370-104	Aerojet General Corp.	82,148,933	35,971
072-0370-105	Aerojet General Corp.	5,607,914	5,829
Total Right-of-Way			**149,823**

	3.44 Acres

Acquisition from either a willing seller or by eminent domain would affect only those areas of land actually needed for project construction or facilities, and would not affect the remainder of the parcel. Property owners may need to obtain waivers from mortgage holders and/or revise title insurance policies to cover a change in property description as a result of selling a portion of their land.

During acquisition the City (and the courts, if involved) would consider not only the value of the land, but the value of anything on the land. They would also consider whether there would be any effect on the remaining parcel by taking a portion of the property. Such effects are termed severance damages. If a public agency wishes to purchase half of a parcel, for example, that purchase may decrease the value of the remaining parcel. In such cases, public agencies often buy the entire parcel since it can be less costly.

The right-of-way being acquired or placed in easement are small amounts compared to the total sizes of the parcels involved and will not require the removal of buildings or other structures with significant financial investment. This section of White Rock Road is designated to be expanded to six-lanes. The right-of-way acquired as a result of this project is consistent with this designation. Although some of the properties along the roadway may be affected by the proposed project by loss of frontage, land use will not be directly altered by the proposed project.

The project is an existing roadway and would not divide any established community, would not affect farmland, nor would it conflict with any land use plans, policies, or regulations of an agency with jurisdiction over the project. Impacts related to land use are considered ***less than significant***.

PUBLIC UTILITIES

GAS AND ELECTRICITY

Pacific Gas and Electric Company (PG&E) supplies natural gas in the project area and Sacramento Municipal Utility District (SMUD) supplies electricity in the project area. SMUD generates, transmits, and distributes electric power to a 900-square-mile service area within Sacramento County, which includes the City. SMUD obtains its electricity from diverse resources including hydrogeneration and cogeneration plants, wind, solar, and biomass/landfill gas power. Existing SMUD electrical lines within the project vicinity are above ground lines.

WATER RESOURCES

The Sacramento County Department of Water Resources manages surface water and groundwater resources via the powers of the County of Sacramento and the

Sacramento County Water Agency. They also provide services including drainage, flood control, and water supply to various areas in the unincorporated Sacramento County, as well as to the cities of Citrus Heights, Elk Grove, and Rancho Cordova.

WASTEWATER

Sanitary sewer and wastewater collection, conveyance, and treatment within the developed areas of Sacramento County are provided by Sacramento Regional County Sanitation District (SRCSD) and Sacramento Area Sewer District (SASD).

STATE HIGHWAYS

The California Department of Transportation (Caltrans) has jurisdiction of State highways, expressways, and freeways. In the general study area, there are two roadway facilities under Caltrans jurisdiction: State Route 16 and U.S. 50.

Jackson Road is a State highway (State Route 16) that facilitates the movement of traffic from its intersection with Folsom Boulevard in the City of Sacramento to its intersection with State Route 49 in Amador County. In the project area, Jackson Road is a two-lane highway with roadside ditches extending though urban and rural areas and along flat terrain. U.S. 50 is a major freeway located north of the project site and extends east-west.

UTILITY COORDINATION

Existing public utilities will be relocated to the ultimate six lane configuration to avoid relocating them in the future. As set forth in utility coordinating procedures for cities and counties, adopted on November 19, 1992 by the Joint Utilities Coordination Committee – American Public Works Association (APWA), each utility is obligated to relocate their facilities when necessary to make way for the proper governmental use of the streets. For this reason, procedures have been established to assist cities, counties, and utilities in coordinating public improvement projects. These procedures set guidelines for project engineers responsible for the development of plans and specifications for city and county projects, to coordinate with utility providers during the design and pre-construction phases of the work.

The objectives of coordination are to identify utility locations and to minimize service interruption. These objectives are met by providing affected utility providers with the necessary construction plans showing project limits, centerline, right of ways, and other pertinent information. Utilities are then able to plan and initiate possible utility relocation prior to project construction.

In addition to following the procedures described above it is required that the Underground Service Alert (USA) is contacted at least 2 full working days before beginning construction activity. USA will contact local utilities and inform them that construction is about to begin in their service area. This notice allows local utilities to

mark the areas where their underground facilities are located near the construction site so that they may be avoided during project construction.

Secondary impacts to biological resources could occur due to relocation of utilities. Any potential impacts are anticipated to occur within the proposed ROW and are discussed in the "Biological Resources" section of this document. Standard practices for locating, working around, and relocating public utilities, including coordination with affected agencies will ensure that impacts related to public utilities are ***less than significant***.

TRAFFIC AND CIRCULATION

The project proposes to widen White Rock Road to its ultimate configuration of six lanes from Sunrise Boulevard to the eastern City limits of Rancho Cordova. East of the city limits White Rock Road will be widened as part of Sacramento County's White Rock Road Widening Project which was approved on April 22, 2009. A Transportation Analysis was prepared for the White Rock Road Widening Project by DKS Associates and was included as part of the Environmental Impact Report that was prepared for that project (*White Rock Road General Plan Amendment & Widening Project*, Sacramento County Control Number 06-GPB-PWE-0901). That document is hereby incorporated by reference and is available for review at the Sacramento County Department of Environmental Review and Assessment 827 7th Street, Room 220, Sacramento CA 98514. The following text summarizes the results of that analysis which are applicable to the proposed project.

LEVEL OF SERVICE DEFINITIONS

Level of service is a qualitative measure of the effect of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Levels of service (LOS) "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced conditions. Table IS-2 presents the LOS definitions.

This traffic assessment presents capacity analyses that were conducted for intersections and roadway segments in accordance with Sacramento County and the City of Rancho Cordova.

Table IS-2: Level of Service Definitions

Level of Service A	**D**escribes primarily free-flow operations at average travel speeds, usually 90 percent of the free-flow speed for the given street class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.
Level of Service B	Describes reasonably free-flow operations at average travel speeds, usually 70 percent of the free-flow speed for the given street class. The ability to maneuver within the traffic stream is only slightly restricted and control delay at signalized intersections are not significant.
Level of Service C	Describes stable operations: however, ability to maneuver and change lanes in midblock locations may be more restricted than at LOS B and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50 percent of the free-flow speed for the street class.
Level of Service D	Borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors. Average travel speeds are about 40 percent of the free-flow speed.
Level of Service E	Characterized by significant delays and average travel speeds of 33 percent or less of the free-flow speed. Such operations are caused by a combination of adverse progression, high signal delay, high volumes, extensive delays at critical intersections and inappropriate signal timing.
Level of Service F	Characterized by urban street flow at extremely low speeds, typically one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.

Source: Highway Capacity Manual Transportation Research Board, Special Report no. 209, Washington, D.C., 2000.

SACRAMENTO COUNTY GENERAL PLAN

The adopted 1993 General Plan depicts White Rock Road as a Post-2010 Thoroughfare from Sunrise Boulevard to the future Grant Line Road/Hazel Avenue connection and an Urban & Rural Collector from that point to the eastern Sacramento County line. The designation of White Rock Road from Sunrise Boulevard to the Rancho Cordova City Limits was change to Pre-2010 Thoroughfare (Normal Width 108-feet, Normally six lanes) by the Sacramento County Board of Supervisors on April 22, 2009 (*White Rock Road General Plan Amendment & Widening Project, Sacramento County Control Number 06-GPB-PWE-0901*).

The following goals and policies of the Sacramento County General Plan relating to traffic and transportation are applicable to the proposed project:

CI-2 Sacramento County shall conduct land use and transportation planning with a regional perspective.

CI-10 Sacramento County shall promote and support the network of Transportation Corridors as designated on the Transportation Plan accompanying this Element.

CI-14 Sacramento County shall utilize design and development standards which support travel by transit, walking, bicycling, and clean alternative fuel and low emission vehicles.

CI-21 Incorporate preferential consideration for buses and private HOV's at strategic congestion points (such as bridges and on-ramps) directed at discouraging drive-alone commuting.

CI-22 Sacramento County shall apply the following Level of Service (LOS) standards for planning roads in the unincorporated area:

Rural collectors: LOS D

Urban area roads: LOS E

and may proceed with additional capacity projects within the scope of the adopted Transportation Plan when the Board of Supervisors has determined that the implementation of all feasible measures which will reduce travel demand in the affected corridor will not provide the target level of service.

CI-24 Sacramento County shall support a program to develop a regional network of High Occupancy Vehicle (HOV) lanes throughout the urban area that includes provisions to designate existing mixed flow lanes for HOV use.

Traffic and circulation impacts are considered significant if a project would cause a roadway or intersection operating at an acceptable LOS to degrade to an unacceptable LOS, increase the volume to capacity ratio by more than 0.05 on a roadway that is operating at an unacceptable LOS, or increase the delay at an intersection that is operating at an unacceptable LOS without the project by more than 5 seconds. Acceptable LOS in Sacramento County are LOS "E" or better within the Urban Services Boundary (USB) and LOS "D" or better outside the USB. Within the limits of the project, White Rock Road is inside the USB where LOS E is used as the significance threshold.

CITY OF RANCHO CORDOVA GENERAL PLAN

The Circulation Plan of the City's Circulation Element designates White Rock Road as a six-lane limited access expressway from Sunrise Boulevard to Prairie City Road. The

Bikeway and Trail Plan identifies the project corridor with a Class II Bike Lane and a grade separated crossing at the west end of the trail segment. The City's Transit System Map designates the entire corridor for Bus Rapid Transit (BRT) and a future Transit Station is identified at the intersection of White Rock Road and Grant Line Roads.

The following goals and policies of the City of Rancho Cordova General Plan relating to traffic and transportation are applicable to the proposed project:

C.1.2 Seek to maintain operations on all roadways and intersections at Level of Service D or better at all times, including peak travel times, unless maintaining this Level of Service would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. Congestion in excess of Level of Service D may be accepted in these cases, provided that provisions are made to improve traffic flow and/or promote non-vehicular transportation as part of a development project or a City-initiated project.

C.1.11 As part of major individual roadway enhancement project (e.g., intersection redesign, signalization of previously un-signalized intersection), enhance and upgrade pedestrian and bicycle facilities within one-quarter mile of the project.

C.2.6 Provide on-street bike lanes along all connector roadways and on local and major roadways when necessary to provide for interconnected routes. On-street bike routes may be provided on local, connector, and major roadways as deemed necessary by the City.

The City of Rancho Cordova formally adopted the County's traffic-impact study guidelines upon incorporation. Plans and policies from the County Guidelines (above) are typically used for analysis except where the City's Circulation Plan supersedes County thresholds and requirements. The City of Rancho Cordova uses a LOS D threshold.

Bikeway and Trails Plan

The City's Bikeway and Trails Plan identifies a Class II Bike Lane this portion of White Rock Road and an Off Street Trail along the eastern half of White Rock Road within the project area. The project includes the Class II Bike lanes as designated in the City's Bikeway and Trails Plan. Though the proposed trail is not included as part of this project, development of said trail is not precluded by the proposed widening of White Rock Road.

Impacts related to the Bikeway and Trails Plan are considered ***less than significant***.

EXISTING TRAFFIC CONDITIONS

Existing count data was obtained between 2005 and 2008. Intersection peak hour turning movement counts were collected by the Traffic Operations Analysis Report - White Rock Road Improvement Project (2006), Traffic Operations Analysis Report - US 50 Auxiliary Lane Project (2006), Folsom South of US 50 Annexation Environmental Impact Report (2007) and the County White Rock Road Widening Project (2008). Peak hour freeway directional volumes were from the Traffic Operations Analysis Report - US 50 Auxiliary Lane Project (2006). Daily Roadway Segment Volumes were collected by Sacramento County Department of Transportation (2005-2007), Caltrans (2007) and White Rock Road GPA & Widening Project (2008).

EXISTING INTERSECTION LEVEL OF SERVICE RESULTS

Sacramento County and Rancho Cordova a.m. and p.m. peak hour operating conditions within the study area are summarized below.

SACRAMENTO COUNTY

The following Sacramento County intersections operate at LOS F during p.m. peak hour:

- Grant Line Road with White Rock Road
- Prairie City Road with White Rock Road

The remaining study intersections meet the LOS E within the USB and the LOS D standard outside the USB.

CITY OF RANCHO CORDOVA

During p.m. peak hour the intersection of Zinfandel Drive with White Rock Road operates at LOS “E”. During both the a.m. and p.m. peak hours all of the other City intersections meet the LOS D standard.

EXISTING ROADWAY SEGMENT TRAFFIC VOLUMES

Level of service analyses were conducted for the study area roadway segments based upon daily traffic volumes for Sacramento County and Rancho Cordova. The number of traffic lanes between intersections and roadway characteristics were also included in the analyses which were conducted utilizing methodologies employed in the analysis of the respective General Plans.

SACRAMENTO COUNTY

All of the Sacramento County roadway segments meet the LOS E standard within the USB.

CITY OF RANCHO CORDOVA

Sunrise Boulevard between Folsom Boulevard and Trade Center Drive and between Kiefer Boulevard and SR 16 currently operate at LOS F. All of the other City of Rancho Cordova roadway segments meet the LOS D.

EXISTING PLUS PROJECT TRAFFIC IMPACTS

The analysis used the Sacramento County General Plan version of the SACOG SACMET model with forecasted traffic volumes and the proposed improvements associated with widening White Rock Road to four lanes and increasing the free flow speed from Grant Line Road to the El Dorado County Line. The difference between the existing plus project model volumes and the existing no project model volumes were added to the count volumes to estimate the existing plus project volumes used for the analysis.

Traffic volumes increase on the following roadways:

- White Rock Road between Zinfandel Drive and Silva Valley Parkway
- Grant Line Road between White Rock Road and Jackson Highway SR-16
- Prairie City Road between US 50 and White Rock Road
- Scott Road (North) between US 50 and White Rock Road
- Zinfandel Drive between White Rock Road and International Drive

Traffic volumes decrease on the following roadways:

- US 50 between Mather Road and Bass Lake Road
- Sunrise Boulevard between Folsom Boulevard and Jackson Highway SR-16
- Zinfandel Drive between US 50 and White Rock Road
- Scott Road (South) between White Rock Road and Latrobe Road
- Placerville Road between East Bidwell and White Rock Road

EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

SACRAMENTO COUNTY

No intersection LOS impacts occur and the existing LOS deficiency at the intersection of White Rock Road and Grant Line Road and the intersection of White Rock Road and Prairie City Road is corrected.

CITY OF RANCHO CORDOVA

The LOS degrades from acceptable to unacceptable at the following intersections:

- Fitzgerald Road – Sunrise Park Drive / White Rock Road (LOS E)
- Grant Line Road / Douglas Road (LOS F)

The study indicates that this impact occurs as a result of the combination of two phases of the County White Rock Road project and states that if only one phase is constructed these impacts would not occur.

EXISTING PLUS PROJECT ROADWAY SEGMENT TRAFFIC VOLUMES

SACRAMENTO COUNTY

No roadway LOS impacts occur at Sacramento County roadway segments.

CITY OF RANCHO CORDOVA

The LOS degrades from acceptable to unacceptable at the following roadway segments:

- Sunrise Boulevard from Folsom Boulevard to Trade Center Drive (LOS F)
- Sunrise Boulevard from Kiefer Boulevard to State Route 16 (LOS F)

Although the LOS degrades at these roadway segments, the project does not cause a LOS impact at Sunrise Boulevard from Folsom Boulevard to Trade Center Drive because implementation of the project results in a volume and volume/capacity ratio decrease. The project does not cause a LOS impact on Sunrise Boulevard from Kiefer Boulevard to State Route 16 because implementation of the project results in a volume/capacity ratio increase of less than five percent.

TRAFFIC STUDY FINDINGS

The results indicate that widening White Rock Road to four lanes from Grant Line Road to the El Dorado County Line would increase traffic volumes on White Rock Road, Grant Line Road, Prairie City Road, and Scott Road (north) and improve traffic operations on US 50 and Sunrise Boulevard by decreasing traffic volumes in the existing plus project condition.

Intersection deficiencies were identified at the intersections of Fitzgerald Road-Sunrise Park Drive / White Rock Road and Grant Line / Douglas Road. Intersection improvements, which include signalization, widening, and restriping the roadway were recommended to correct those deficiencies.

PROJECT IMPACTS

The proposed widening of White Rock Road between Luyung and the City limit is generally consistent with the County's widening of White Rock Road and intended to complete the overall widening of White Rock Road as designated in the General Plans of the County and City. The project implements the improvements at the intersection of Fitzgerald Road – Sunrise Park Drive/White Rock Road that were recommended in the traffic study. The improvements include widening White Rock Road to four lanes at the intersection and adding a westbound left turn lane. With this improvement the intersection would operate at LOS B with an average intersection delay of 12.6 seconds during the a.m. peak hour and operate at LOS B with an average intersection delay of 13.0 seconds during the p.m. peak hour.

The project will not cause existing roadways or intersections to operate at unacceptable levels or degrade existing unacceptable conditions. The proposed project would improve traffic flow between the industrial portion of White Rock Road on the west by eliminating a bottle neck at that location and prevent a future bottle neck at the eastern portion of the project site where the project connects to the County widening project. For these reasons traffic impacts are considered ***less than significant***.

NOISE

RANCHO CORDOVA GENERAL PLAN NOISE ELEMENT

The Rancho Cordova General Plan Noise Element (2006) identifies noise criteria for various stationary and transportation noise sources. The Noise Element of the City General Plan supersedes the Noise Element of the County of Sacramento General Plan except where the City General Plan is silent on an issue. The following goals and policies of the City's Noise Element are relevant to the proposed project:

Goal N.1: Ensure that all new development will be free of noise disturbances.

Policy N.1.5: Mitigate noise created by the construction of new transportation noise sources (such as new roadways or new light rail service) to the maximum extent feasible to comply with the City's standards.

Policy N.1.7: To the extent feasible and appropriate, the City shall require the use of temporary construction noise control measures for public and private projects that may include the use of temporary noise barriers, temporary relocation of noise-sensitive land uses or other appropriate measures.

Goal N.2: Reduce noise disturbances in existing development and ensure that all mitigation methods positively contribute to the City's livability.

Policy N.2.2: Ensure that operational noise levels of new roadway projects will not result in significant noise impacts.

Action N.2.2.1: Assess the significance of the noise increase of all roadway improvement projects in existing areas according to the following criteria:

Where existing traffic noise levels are less than 60 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +5 dB increase in noise levels due to roadway improvement projects will be considered significant, and

Where existing traffic noise levels range between 60 and 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +3 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant, and

> Where existing traffic noise levels are greater than 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +1.5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant.

A noise analysis was prepared as part of the environmental document (EIR/EIS) for the Rio del Oro Specific Plan project (*Final Environmental Impact Report/ Supplemental Draft Environmental Impact Statement Rio del Oro Specific Plan Project State Clearinghouse #2003122057*). The analysis used the FHWA Noise Prediction Model (FHWA-RD-77-108) based on traffic information (average daily traffic, vehicle speeds, and roadway width) from the traffic study prepared for that project. The analysis documented the existing noise level at various roadway segments near the project site. As documented in the survey, the existing daytime A-weighted sound level (i.e., weighted to represent the frequency range of human hearing) on White Rock Road east of Luyung Drive is 68.3 dBA on 2/04/2004 and 67.4 dBA on 02/04/2005.

Impacts related to the noise generated from White Rock Road were discussed in the EIR/EIS prepared for the Rio del Oro Specific Plan Project. Traffic noise levels were calculated for future cumulative conditions at buildout (year 2030) with and without buildout of the Rio del Oro project. The analysis identified predicted noise level at 50 feet from the near travel lane centerline. The predicted noise level for White Rock Road from Sunrise Boulevard to Grant Line Road in the cumulative scenario was 73.44 dBA without the Rio del Oro project and 75.81 dBA with that project. The noise generated from White Rock Road was identified as a significant impact on residential dwellings within the 60 dBA CNEL. Mitigation measures are proposed as part of that plan; however, impacts were identified as being significant and unavoidable because no feasible mitigation measures were available to reduce all exterior noise levels to within City noise standards.

Traffic noise levels were also calculated for the baseline scenario with and without buildout of Phase 1 of the Rio del Oro project. The predicted noise level for White Rock Road from Sunrise Boulevard to Grant Line Road in the baseline scenario was 71.13 dBA without Phase 1 of Rio del Oro and 74.27 dBA with Phase 1 of Rio del Oro. The 3.14 dBA increase that occurs as a result of that project was identified as exceeding City standards; however, it was not considered a significant impact because the project does not propose to locate sensitive land uses adjacent to White Rock Road.

Surrounding land uses include industrial uses along Sunrise Boulevard west of Salisbury Road and heavy industrial uses by Aerojet General Corporation north of White Rock Road. As stated above, where the existing noise level is greater than 65 dBA an increase of 1.5 dB Ldn at the outdoor activity areas of noise-sensitive uses is considered significant. The roadway widening is expected to increase the number of daily trips on White Rock Road, which will result in an increase in traffic noise. However, the existing uses adjacent to the project portion of White Rock Road are industrial and/or commercial and currently there are no residential uses adjacent to the project.

The existing noise level generated from White Rock Road at 50 feet from the near travel lane centerline exceeds 65 dB and future noise levels will likely increase by more than 1.5 dB; however, no noise sensitive uses currently exist adjacent to the roadway that would be exposed to noise levels that exceed the standards established by the City. Further, the proposed project would not result in a new traffic noise source. The improvements to and widening of White Rock Road that would occur as part of this project are intended to accommodate the future traffic that is anticipated as part of the development of communities that are planned in the area but that are not yet built. The noise impacts to the future residential development within the Rio del Oro Specific Plan area are addressed in the EIR/EIS that was prepared for that project.

The project may utilize rubberized asphalt. Recent studies conducted for the Sacramento County Department of Environmental Review and Assessment and Department of Transportation indicate that the use of rubberized asphalt appears to result in an average traffic noise level reduction of 4 dB over that provided by conventional asphalt. If rubberized asphalt is used any increase in traffic noise associated with the roadway widening would be expected to be offset by 4 dB and potentially result in a decrease in traffic noise compared to the existing condition.

CONSTRUCTION NOISE

Construction noise is considered exempt from the noise standards as outlined in Section 6.68.090(e) of the Rancho Cordova Municipal Code. The exempt status applies to construction activity that occurs between the hours of 6:00 a.m. to 8:00 p.m., Monday through Friday and 7:00 a.m. to 8:00 p.m. on Saturday and Sunday. Other exempt activities include school athletic and entertainment events and activities conducted on public parks and playgrounds. Project construction is expected to be limited to the exempted hours as outlined above. It should be noted that, as discussed above, there are no existing sensitive receptors located adjacent to the project alignment.

For the reasons discussed above impacts related to noise are considered ***less than significant***.

AIR QUALITY

The project portion of White Rock Road 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. Sacramento County is within the Sacramento Federal Ozone Nonattainment Area (SFNA). With two exceptions, the SFNA area is in attainment for all state and national ambient air quality standards. The exceptions are that the SFNA is designated a "severe" non-attainment area for the federal eight-hour ambient air quality standards for ozone, and is also a "serious" nonattainment area for the state one-hour standard. Therefore, as part of the SFNA, Sacramento County is out of compliance with the state and federal ozone standards.

Sacramento County is also designated non-attainment for the state and federal 24-hour PM_{10} ambient air quality standards, but the US Environmental Protection Agency

proposes to classify Sacramento County as being in attainment with the new federal $PM_{2.5}$ standard.

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. The significance threshold for particulate matter is based on the California Ambient Air Quality Standards (CAAQS). The thresholds are detailed in Table IS-3 below.

Table IS-3: SMAQMD Significance Thresholds - Ozone Precursor Emissions

	ROG (lbs/day)	NO_x (lbs/day)	CO ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)
Construction (short-term)	None	85	50	50
Operational (long-term)	65	65	50	50

CONSTRUCTION IMPACTS

Short-term air quality impacts are mostly due to dust (PM_{10}) 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} is considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

The SMAQMD "Guide to Air Quality Assessment in Sacramento County" (December 2009, as amended, hereinafter called the SMAQMD Guide) contains screening thresholds for significant impacts. Some PM_{10} 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", in the Sacramento County Code relating to land grading and erosion control [Title 16, Chapter 16.44, Section 16.44.090(K)]. Dispersion modeling conducted for projects of various sizes has resulted in the conclusion that projects involving more than 15 acres of active grading at any one time will result in significant impacts, even with standard dust abatement measures.

Implementation of the proposed project would result in the construction of widened roads and embankments, as well as intersection improvements. Temporary

construction emissions would result from grubbing/land clearing, grading/excavation, drainage/utilities/sub grade construction, and paving activities and construction worker commuting patterns. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather. The project may involve the use of heavy-duty excavators, graders, backhoes, jack hammers, cranes, drillers, dump/haul trucks, concrete mixer trucks, air compressors, rollers, upright compactors, generators, floor saws, and pavement planers, though not all of this equipment will operate simultaneously. It is usually only when many of the larger pieces of equipment operate simultaneously that the significance thresholds are exceeded.

The SMAQMD Roadway Construction Model (version 6.3.2) was used to assess ozone precursor emissions. Project construction is anticipated to last 18 months, or 360 working days and it was assumed that construction activities would occur for 8 hours per day. Conservative inputs were used in the model to estimate the highest emissions that would occur at any time during construction. The model results are detailed in Table IS-4 below.

Table IS-4: Construction Emissions Estimates (pounds per day)

Construction Activity	**ROG**	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Grubbing/land clearing	8.2	42.9	30.9	22.5	6.4	4,688.2
Grading/excavation	12.7	75.3	81.9	23.9	7.6	10,100.8
Drainage/utilities/sub-grade	7.5	37.5	28.8	22.4	6.4	4,458.7
Paving	6.0	23.3	22.6	2.1	1.9	2,843.4
SMAQMD Threshold	***None***	***85***	***None***	***CAAQS***	***CAAQS***	***None***

Note: Emissions calculations based on Road Construction Emissions Model (Version 6.3.2)

Although the project encompasses approximately 97 acres, the entire acreage will not be actively graded at one time. Unless a site is quite small, a contractor typically hires enough equipment to actively grade a portion of the site each day, rather than contracting for enough equipment to grade the site all during the same day. It is anticipated that no more than 0.25 acres will be actively graded per day. 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.

Using conservative inputs, the estimated emissions from the project are less than the established significance thresholds. Further, SMAQMD Basic Construction Emission

Control Practices will be implemented as part of the project. For these reasons construction impacts related to air quality are considered ***less than significant***.

Operational Impacts

Air pollutant emissions associated with the project would be generated primarily by exhaust emissions from the operation of roadway vehicles.

The proposed project would not generate new vehicle trips and, because the project would not change vehicle access patterns, the project would not be expected to geographically redistribute vehicle trips. Therefore, the proposed project is not expected to change vehicle miles traveled.

Because the project will not increaser the number of vehicle miles traveled the project is not expected to substantially contribute to regional ozone emissions. Operational impacts related to air quality are considered ***less than significant***.

Carbon Monoxide (CO) Emissions

Automobiles are the most common carbon monoxide (CO) emitters and CO emissions can be locally concentrated along roadways. Emissions are greatest where high concentrations of vehicles exist. Roadways with stalled traffic and busy intersections where numerous vehicles queue for extended periods of time are the sources for highest CO concentrations. Crowded intersections are the most persistent sources of high CO emissions.

The proposed project will improve the level of service at the intersections within the project area and is not expected to result in a CO concentration violation. Impacts associated with carbon monoxide emissions are considered ***less than significant***.

Drainage

The project construction area is within the Federal Emergency Management Agency's (FEMA) flood zone map panel 060262-0210 E and FEMA flood zone map 060262-0250 C (Plate IS-4 and Plate IS-5). The floodplain is identified as Zone X. Zone X delineates the 500 year floodplain. Typically, such areas have a one percent annual chance of flooding within a 500-year period.

The Sacramento County Department of Water Resources manages surface water and groundwater resources via the powers of the County of Sacramento and the Sacramento County Water Agency. They also provide services including drainage, flood control, and water supply to various areas in the unincorporated Sacramento County, as well as to the cities of Citrus Heights, Elk Grove, and Rancho Cordova.

The project includes extension of the existing culverts to accommodate the new roadway width. These improvements will be completed in accordance with the design

standards set forth in the Improvement Standards adopted by the City. It is anticipated that culverts in poor condition or that have inadequate capacity will be replaced.

Compliance with the above mentioned improvement standards will ensure that impacts related to drainage are ***less than significant***.

STORMWATER POLLUTION AND EROSION/SEDIMENT CONTROL

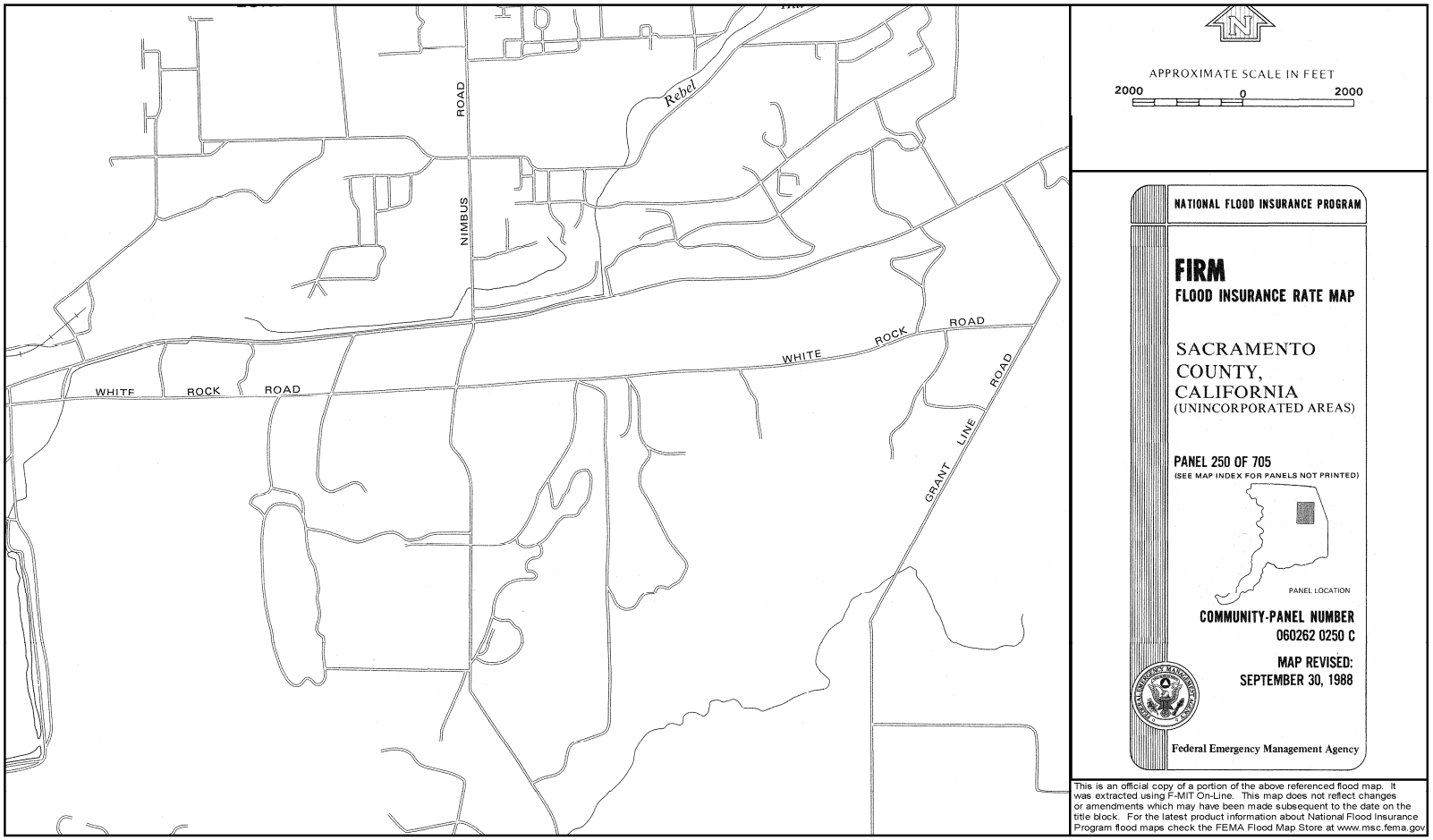
Project compliance with requirements outlined below, as administered by the City of Rancho Cordova and Central Valley Regional Water Quality Control Board (Regional Board), will ensure that project-related erosion and water pollution impacts are less than significant.

BACKGROUND

Sacramento County and the cities of Rancho Cordova (City), Citrus Heights, Folsom, Galt, and Sacramento, are co-permittees for an area-wide National Pollutant Discharge Elimination System (NPDES) municipal stormwater permit through the Central Valley RWQCB. The Municipal Stormwater Permit requires the City to reduce pollutants in stormwater discharges to the maximum extent practicable. The City complies with this permit by enforcing ordinances and requirements of the Stormwater Quality Improvement Plan as established by the County to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas.

Plate IS-4: FEMA Flood Rate Insurance Map East

Plate IS-5: FEMA Flood Rate Insurance Map West



CITY OF RANCHO CORDOVA ORDINANCES

The City has established a Stormwater Management and Discharge Control Ordinance (Rancho Cordova Municipal Code 15.12). Pursuant to Section 15.12.025 the County is authorized to administer and enforce the provisions of the ordinance. The 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 within the County, regardless of size or land use type. In addition, Rancho Cordova Municipal Code Section 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 Section 16.44 are subject to the Stormwater Ordinance (Section 15.12) described above.

STATE PERMIT FOR CONSTRUCTION PROJECTS

In addition to complying with the City'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. The Construction General Permit is issued by the State Water Resources Control Board (http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml) and enforced by the Regional Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction. The General Permit 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 grading permit must show proof that a NOI has been filed and must submit a copy of the SWPPP. Although the City has no enforcement authority related to the Construction General Permit, the City is required by its Municipal Stormwater Permit to verify that SWPPPs include six minimum components.

TEMPORARY CONSTRUCTION BMPS

During the wet season (October 1 – April 30), the project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the City ordinances and the State's Construction General Permit. During the rest of the year, typically erosion controls are not required, except in the case of predicted rain.

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 City and the Central Valley Regional Water Quality Control Board (Regional Board).

Post-Construction Stormwater Quality Control Measures

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.

Source control BMPs are can be used 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 final selection and design of post-construction stormwater quality control measures is subject to the approval of the City of Rancho Cordova.

BIOLOGICAL RESOURCES

The proposed project is located within both the Carmichael and Buffalo Creek USGS 7.5 minute Quadrangles. A query of the United States Fish and Wildlife Service (USFWS) Endangered Species Database, the California Natural Diversity Database (CNDDB), the California Native Plant Society (CNPS) database for these quadrangles, a review of biological studies previously conducted on the site and in the vicinity, and field surveys conducted for this project were used to identify species that are known to occur or have the potential occur on the project site. Table IS-5 provides a summary of all special status species identified through the sources listed above. The table provides an evaluation of the species potential to occur within the study area. Only those species with the potential to occur in the study area are discussed further.

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.

The State and federal Endangered Species Acts are intended to operate in conjunction with CEQA and the National Environmental Policy Act (NEPA) to help protect ecosystems upon which endangered and threatened species depend. The USFWS is responsible for implementation of the FESA while the California Department of Fish and Game (CDFG) 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.

Table IS-5
Special Status Species

Scientific Name	Common Name	Status Fed/State/CNPS	General Habitat Description	Habitat Present/Absent	Rational
Plants					
Gratiola heterosepala	Boggs Lake hedge-hyssop	--/CE/1B	Annual herb found on clay soils in vernal pools and along the lake margins of marshes and swamps from 10 to 2,375 meters (CNPS, 2008).	P	Vernal pools exist within the project vicinity; however, this species was not detected during prior surveys.
Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	--/--/1B	Annual herb found on mesic soils in Valley and foothill grassland from 30 to 100 meters (CNPS, 2008).	P	Habitat exists within the project vicinity; however, this species was not detected during prior surveys.
Legenere limosa	Legenere	--/--/1B	Annual herb found in vernal pools from 1-880 meters (CNPS, 2008).	P	Vernal pools exist within the project vicinity; however, this species was not detected during prior surveys.
Navarretia myersii ssp. *myersii*	pincushion navarretia	--/--/1B	Annual herb often found in vernal pools from 20 to 330 meters (CNPS, 2008).	P	Vernal pools exist within the project vicinity; however, this species was not detected during prior surveys.
Orcuttia tenuis	slender orcutt grass	FT/CE/1B	Annual herb found in vernal pools from 35 to 1,760 meters (CNPS, 2008).	P	Vernal pools exist within the project vicinity; however, this species was not detected during prior surveys.

Table IS-5
Special Status Species

Scientific Name	Common Name	Status Fed/State/CNPS	General Habitat Description	Habitat Present/Absent	Rational
Orcuttia viscida	Sacramento orcutt grass	FE,CH/CE/1B	Annual herb found in vernal pools from 30 to 100 meters (CNPS, 2008).	P	Vernal pools exist within the project vicinity; however, this species was not detected during prior surveys.
Pseudobahia bahiifolia	Hartweg's golden sunburst	FE/CE/1B	Annual herb found on, often acidic, clay in cismontane woodland and Valley and foothill grassland from 15-150 meters (CNPS, 2008).	P	Habitat exists near the site, however this species was not detected during prior surveys.
Sagittaria sanfordii	Sanford's arrowhead	--/--/1B	Rhizomatous herb emergent found in assorted shallow freshwater marshes and swamps from 0-650 meters (CNPS, 2008).	P	This species was not detected during prior surveys.
Animals					
Invertebrates					
Branchinecta conservatio	Conservancy fairy shrimp	FE/--/--	Inhabits aquatic environment provided by vernal pool wetland ecosystems. Depends on the presence of water in the winter and early spring and the absence of water during the summer.	P	The species was undocumented in previous studies but has the potential to exist within vernal pools that are within the project vicinity.
Branchinecta lynchi	vernal pool fairy shrimp	FT/--/--	Inhabits ephemeral wetland habitats and vernal pools within sandstone, alkaline soils, and alluvial fan terraces, within annual grassland and pine forests from 10-1,700 meters.	P	This species has been documented within the project vicinity.
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT/--/--	Inhabits elderberry (*Sambucus* species) shrubs, with stems with at least 1-inch in diameter, within riparian forest communities from 0-762 meters.	P	Elderberry shrubs have been documented along the project corridor.

Table IS-5
Special Status Species

Scientific Name	Common Name	Status Fed/State/CNPS	General Habitat Description	Habitat Present/Absent	Rational
Lepidurus packardi	vernal pool tadpole shrimp	FE/--/--	Inhabits a variety of ephemeral wetland habitats, typically vernal pools on High Terrace landforms within annual grassland.	P	This species has been documented within the project vicinity.
Fish					
Hypomesus transpacificus	Delta smelt	FT/CT/--	Inhabits estuarine waters. Majority of life span is spent within the freshwater outskirts of the mixing zone (saltwater-freshwater interface) within the Delta.	A	The project is not located within the vicinity of the Delta or its tributaries.
Oncorhynchus mykiss	Central Valley Steelhead	FT/--/--	Inhabits cool, clear, fast-flowing permanent streams and rivers with riffles and ample cover from riparian vegetation or overhanging banks. Spawns in: streams with pool and riffle complexes. For successful breeding, require cold water and gravelly streambed.	A	The project is not located within the vicinity of a stream or river.
Oncorhynchus tshawytscha	Central Valley spring-run Chinook salmon	FT/CT/--	Inhabits large deep pools in tributaries with moderate velocities and a large bubble curtain at the head for spawing.	A	The project is not located within the vicinity of a stream or river.
Oncorhynchus tshawytscha	winter-run, Sacramento River Chinook salmon	FE/CE/--	Returns to the Upper Sacramento River in the winter but delay spawning until spring and summer. Juveniles spend 5 to 9 months in the river and estuary before entering the ocean.	A	The project is not located within the vicinity of a stream or river.

Table IS-5
Special Status Species

Scientific Name	Common Name	Status Fed/State/CNPS	General Habitat Description	Habitat Present/Absent	Rational
Amphibians					
Ambystoma californiense	California tiger salamander, Central population	FT/CSC/--	Inhabits vernal pools, ephemeral wetlands, and seasonal ponds, including constructed stockponds, in grassland and oak savannah from 3-1054 meters.	P	Though vernal pools and wetlands are located within the project vicinity the project occurs outside the known range of this species.
Rana aurora draytonii	California red-legged frog	FT/CSC/--	Inhabits permanent and temporary pools of streams, marshes, and ponds with dense grassy and/or shrubby vegetation from 0 to 1,160 meters.	A	The project corridor does not contain suitable habitat for this species.
Spea hammondii	western spadefoot toad	--/CSC/--	Inhabits Valley and foothill grasslands, open chaparral, and pine-oak woodlands. Prefers open vegetation and short grasses on sandy and gravelly soils from 0 to 1,370 meters. Breeds in quiet streams and temporary pools with temperatures between 48° F and 86° F.	P	Vernal pools and grassland are present within the project corridor.
Reptiles					
Thamnophis gigas	giant garter snake	FT/CT/--	Inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands. Requires adequate water during its active season (early spring through mid-fall) to provide food and cover, emergent, herbaceous wetland vegetation for foraging and cover, grassy banks and openings in waterside vegetation for basking, and higher elevation uplands for cover and refuge from flood waters during its dormant season (winter).	A	The project corridor does not contain suitable habitat for this species.

Table IS-5
Special Status Species

Scientific Name	Common Name	Status Fed/State/CNPS	General Habitat Description	Habitat Present/Absent	Rational
Birds					
Buteo swainsoni	Swainson's hawk	--/CT/--	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands, alfalfa, or grain fields supporting rodent populations.	P	Suitable nesting trees are located adjacent to the project corridor.
Riparia riparia	bank swallow	--/CT/--	Inhabits primarily riparian and other lowland habitats west of the deserts from spring through fall. Inhabits riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils, into which it digs nesting hole, during the summer.	A	The project corridor does not contain suitable habitat for this species.

STATUS CODES

FEDERAL: United States Fish and Wildlife Service
FE Federal Endangered
FT Federal Threatened
FC Federal Candidate for Listing
CH Critical Habitat

STATE: California Department of Fish and Game
CE California Listed Endangered
CR California Listed Rare
CT California Listed Threatened
CSC California Species of Special Concern
CFP California Fully-Protected

CNPS: California Native Plant Society
List 1A Plants Presumed Extinct in California
List 1B Plants Rare, Threatened, or Endangered in California and Elsewhere
List 2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
List 3 Plants About Which We Need More Information- A Review List

SOURCE: CDFG, 2003; CNPS, 2008; Stebbins, 2003; Vickery, 1996.

Incidental take 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. The USFWS may issue such a permit upon completion of a satisfactory conservation plan for any listed species that would be affected by the project.

Under CEQA, species officially proposed for listing (federal classification), candidate species (federal and state classification), species of special concern (State of California classification), and species of concern (federal classification) are fully protected. Plants identified as "1B" by the CNPS are also afforded protection pursuant to CEQA.

Raptors (birds of prey) and migratory birds are protected by both federal and state law. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of any migratory birds (including raptors) except in accordance with regulations prescribed by the Secretary of Interior. Raptors are also protected by the Fish and Game Code of California.

Collectively, the sensitive species outlined above are referred to as special status species.

The USFWS requires the following notification to be provided in the environmental document for any project which has the potential to adversely affect threatened or endangered species:

> The applicant is hereby notified of additional conditions as stipulated by the U.S. Fish and Wildlife Service. Features of the applicant's project may adversely affect federally listed threatened or endangered species. An applicant must go through one of two processes to obtain authorization to take federally listed species incidental to completing his or her project. One of the processes is formal consultation. When the authorization or funding of a Federal agency is an aspect of a project that may affect federally listed species, section 7 of the Endangered Species Act requires the Federal agency to formally consult with the Service. Formal consultation is concluded when the Service issues a biological opinion to the Federal agency. The biological opinion includes terms and conditions to minimize the effect of take on listed species. The Federal agency must make the terms and conditions of the biological opinion into binding conditions of its own authorization to the project applicant. An example of this process is when the U.S. Army Corps of Engineers (USACOE) consults with the Service prior to issuing a permit to fill jurisdictional waters under Section 404 of the Clean Water Act. The terms and conditions of the biological opinion become binding on the project applicant through the Corps' 404 authorization. When no

Federal funding or authorization is involved in a project, an applicant must prepare a habitat conservation plan and obtain a permit directly from the Service in accordance with section 10(a)(1)(B) of the Act. For additional information on these processes please contact the Endangered Species Division of the U.S. Fish and Wildlife Service's Sacramento Fish and Wildlife Office at (916) 979-2725.

VERNAL POOL SHRIMP

The project site contains vernal pools and other wetland features which constitute habitat for federally listed vernal pool shrimp species. The following vernal pool shrimp species are listed as federally endangered species: conservancy fairy shrimp (*Branchinecta conservatio*), and vernal pool tadpole shrimp (*Lepidurus packardi*). Vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as a federally threatened species and California linderiella (*Linderiella occidentalis*) and midvalley fairy shrimp (*Branchinecta mesovallensis*) are listed as federal species of concern.

Suitable habitat for all vernal pool species has declined dramatically over the past century. Continued conversion of grassland-vernal pool ecosystems to urban or agricultural uses is the largest threat to survival of the vernal pool shrimp. Alteration of vernal pool hydrology, in particular, can dramatically degrade vernal pool habitats. Vernal pool hydrology can be altered by a variety of activities, including the construction of roads, trails, ditches, or canals that can block the flow of water into, or drain water away from the vernal pools and vernal pool complexes. Populations have also declined as a result of water contamination.

The project site contains 0.291 acres of vernal pools (vernal pool impacts are discussed below). Vernal pools are suitable habitat for the vernal pool shrimp species listed above. Three of these species (conservancy fairy shrimp, vernal pool tadpole shrimp, and vernal pool fairy shrimp) have been documented in the project area.

According to USFWS guidelines, activity within 250 feet of a vernal pool may have an adverse effect on the vernal pool habitat and the species that inhabit it. Typically, a USFWS approved buffer is established at 250 feet from the vernal pool to ensure that the vernal pool and resident species are not impacted during construction. The 250 foot buffer may be reduced to 50 feet provided that no special status species are identified in a formal special status species survey.

Any encroachment within the buffer, when listed species are present, is considered a potential impact to listed species and is allowed only when appropriate permit(s) have been obtained or adequate mitigation has been authorized from the USFWS and the CDFG. Encroachment into wetlands without listed species will require USACOE permitting.

The widening of the roadway is expected to result in direct impacts to the vernal pools located adjacent to the roadway. In the absence of a determinant species study it is assumed that listed species are present. Consultation with the USFWS will be

necessary to establish compensatory mitigation for impacts to these species. Mitigation has been included to require consultation prior to construction within a 250-foot buffer around on-site vernal pools. With mitigation impacts are considered ***less than significant***.

VALLEY ELDERBERRY LONGHORN BEETLE

The project site contains habitat for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). The valley elderberry longhorn beetle (VELB) is listed as a federally threatened species. This animal is fully protected under the FESA (16 U.S.C. 1531 et seq.). The valley elderberry longhorn beetle (beetle) is completely dependent on its host plant, elderberry (*Sambucus* species), which is a common component of the remaining riparian forests and adjacent upland habitats of California's Central Valley. Over 90% of our riparian forests have been cleared in the past century for agricultural, as well as urban and suburban, development. The wood from these forests has also been used extensively as fuel and building materials. Additionally, extensive use of pesticides, grazing and other mismanagement have severely degraded otherwise undisturbed patches of riparian habitat.

The life cycle takes one or two years to complete. The animal spends most of its life in the larval stage, living within the stems of an elderberry plant. Adult emergence is from late March through June, about the same time the elderberry produces flowers. The adult stage is short-lived.

If elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level occurs within 100 feet of the proposed project site, or are otherwise located where they may be adversely affected by the proposed action, consultation with the USFWS will be required. In order to minimize impact to VELB the "Conservation Guidelines for the Valley Elderberry Longhorn Beetle" (July 9, 1999) outlines suggests installing protective fencing around the shrub, plant relocation, and/or replacement planting.

The nearest VELB CNDDB occurrence is 1.8 miles north of the project site. A recent field investigation of the site identified 95 elderberry shrubs adjacent to White Rock Road (Plate IS-6). The shrubs are located within the project's APE. Due to the location of the elderberry shrubs, on-site preservation is not considered feasible.

The USFWS "Conservation Guidelines for the Valley Elderberry Longhorn Beetle" (July 9, 1999) provides guidance for determining mitigation for impacts to the VELB. Mitigation for the VELB is based upon the state of the elderberry bushes they inhabit. Mitigation ratios vary depending upon the following factors: presence or absence of exit holes, the number of stems on the elderberry shrub/tree, the diameter of each stem at ground level, and whether or not the elderberry shrub/tree occurs in a riparian area (Table IS-6).

Plate IS-6: Elderberry Shrub Locations

Table IS-6: Mitigation Ratios

Location	Stems (maximum diameter at ground level)	Exit Holes on Shrub Y/N (quantify)[1]	Elderberry Seedling Ratio[2]	Associated Native Plant Ratio[3]
non-riparian	stems >=1" & =<3"	No:	1:1	1:1
		Yes:	2:1	2:1
non-riparian	stems >3" & <5"	No:	2:1	1:1
		Yes:	4:1	2:1
non-riparian	stems >=5"	No:	3:1	1:1
		Yes:	6:1	2:1
riparian	stems >=1" & <=3"	No:	2:1	1:1
		Yes:	4:1	2:1
riparian	stems > 3" & < 5"	No:	3:1	1:1
		Yes:	6:1	2:1
riparian	stems >=5"	No:	4:1	1:1
		Yes:	8:1	2:1

[1] All stems measuring one inch or greater in diameter at ground level on a single shrub are considered occupied when exit holes are present anywhere on the shrub.

[2] Ratios in the Elderberry Seedling Ratio column correspond to the number of cuttings or seedlings to be planted per elderberry stem (one inch or greater in diameter at ground level) affected by a project.

[3] Ratios in the Associated Native Plant Ratio column correspond to the number of associated native species to be planted per elderberry (seedling or cutting) planted.

None of the onsite elderberry shrubs documented onsite occur within riparian areas and no exit holes were observed during the field survey. As shown in Table IS-7 below the 95 documented elderberry shrubs combine for a total of 534 stems which will require mitigation of 896 stems.

Table IS-7: Project Specific Elderberry Mitigation

Stem Size	Number of Stems	Mitigation Ratio	Mitigation Required
1-3" stems	243	1:1	243 stems
3-5" stems	220	2:1	440 stems
>5" stems	71	3:1	213 stems
TOTAL	**534**		**896 stems**

Though construction will ultimately result in the removal of these elderberry shrubs the consultation and permitting process may take some time and construction may begin prior to permit acquisition. Therefore, mitigation has been recommended to establish a buffer area around the elderberry plants. Site grading and construction outside this buffer area will be allowed prior to obtaining the appropriate removal permits. USFWS guidelines state that complete avoidance (no adverse effects) may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants. USFWS may approve encroachment inside the 100-foot buffer area, but a minimum setback of 20 feet must still be provided.

With mitigation, impacts to the valley elderberry longhorn beetle are considered ***less than significant***.

NESTING RAPTORS

The project site contains suitable nesting habits for nesting raptors. Raptors are defined as members of the order Falconiformes (vultures, eagles, hawks, and falcons) and the order Strigiformes (owls). Common species of raptors found locally include: red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Swainson's hawk (*Buteo swainsoni*), American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), and great horned owl (*Bubo virginianus*). The following raptors are listed as Californian State Species of Special Concern: northern harrier (*Circus cyaneus*), osprey (*Pandion haliaetu*), merlin (*Falco columbarius*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperi*), prairie falcon (*Falco mexicanus*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), and burrowing owl (*Athene cunicularia*). American peregrine falcon (*Falco peregrinus anatum*), golden eagle, and white-tailed kite (*Elanus leucurus*) are classified as Fully Protected under Californian Fish and Game Code Section 3511, 4700, 5050, and 5515. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Raptors and their active nests are protected by the Fish and Game Code of California (§3503.5, 3511, and 3513). The Code states the following: "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird." Because most raptors migrate they are also protected by the Federal 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 the Federal Endangered Species Act 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."

Because there are trees that provide suitable nesting habitat for hawks adjacent to the roadway and within the vicinity of the project, if construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for raptor nests on the site and on nearby trees (within ½ mile of the site) shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the California Department of Fish and Game (CDFG) shall be contacted to determine appropriate protective measures. The protective measures required by CDFG will prevent impacts to nesting raptors. If no active nests are found during the focused survey, no further mitigation will be required.

With mitigation, impacts to nesting raptors are considered ***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. In addition Swainson's hawk is protected under the Federal Migratory Bird Treaty Act of 1918.

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 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.

The CEQA analysis provides a means by which to ascertain impacts to the Swainson's hawk, and consists of separate analyses of impacts to nesting habitat and foraging habitat. When the analysis identifies impacts, mitigation measures are established that may 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 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 CESA.

NESTING HABITAT

For determining impacts to and establishing mitigation for nesting Swainson's hawks the CDFG recommends implementing the measures set forth in the CDFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California (November 1, 1994). These state that no intensive new disturbances, such as heavy equipment operation associated with construction, should be initiated within ¼ mile of an active Swainson's hawk nest in an urban setting or within ½ mile in a rural setting between March 1 and September 15.

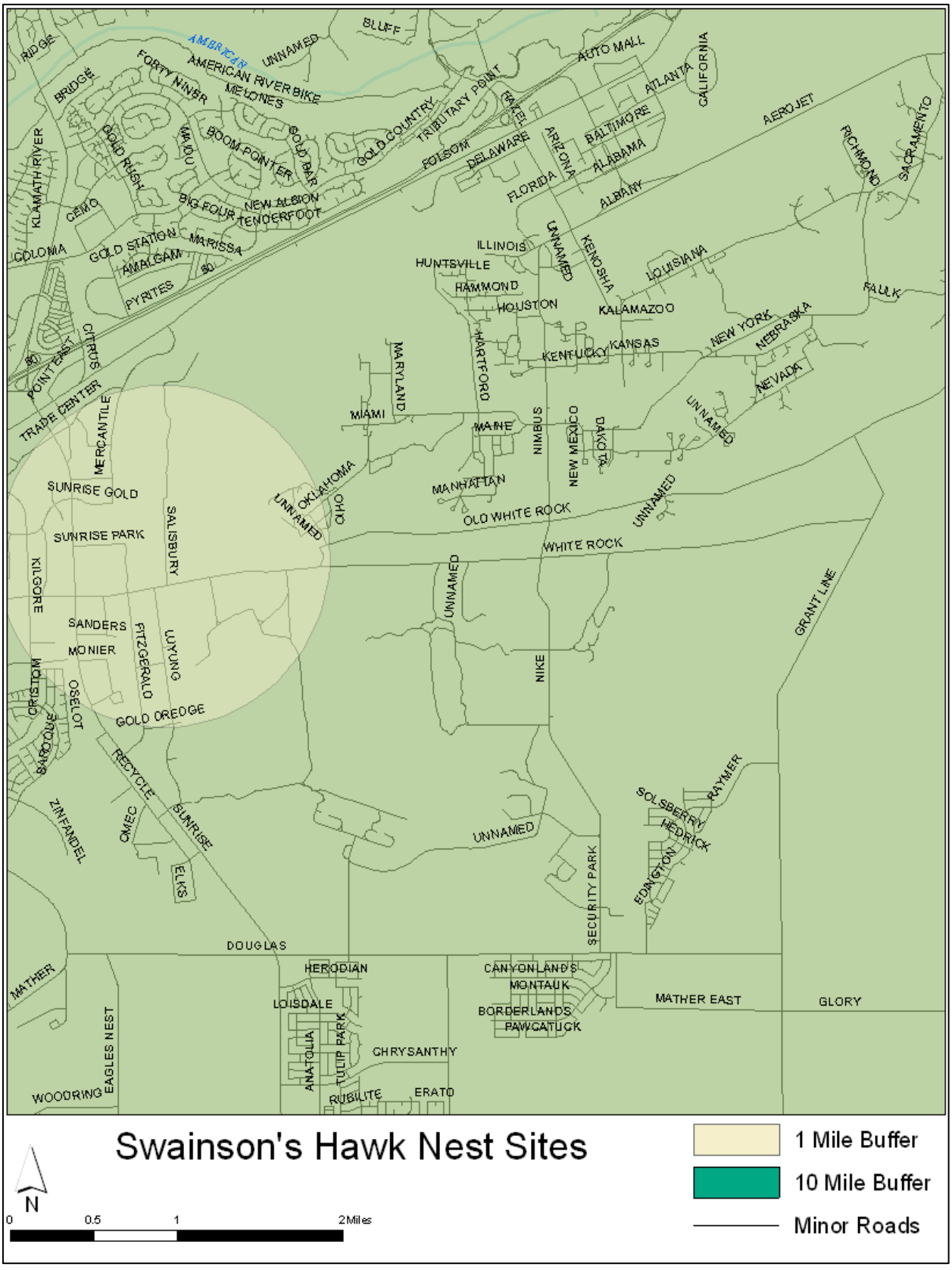
The nearest known Swainson's hawk nest is located near the western portion of the project limits between Salisbury Road and Sunrise Park Drive (see Plate IS-7). Given the project's vicinity to a known nest site and that nearby trees provide suitable nesting habitat for the Swainson's hawk, construction activities on the project site have the potential to impact an active nest. If construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for Swainson's hawk nests and other nesting raptors on the site and on nearby trees (within ½ mile of the site) shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found CDFG shall be contacted to determine appropriate protective measures. If no active nests are found during the focused survey, no further mitigation will be required. If active nests are found, the protective measures required by CDFG will prevent impacts to nesting Swainson's hawks.

FORAGING HABITAT

Swainson's hawks are known to forage up to 18 miles from their nest site; however, that is the extreme range of one individual bird's daily movement. It is more common for a Swainson's hawk to forage within 10 miles of its nest-site. Therefore it is generally accepted and CDFG recommends evaluating projects for foraging habitat impacts when they are within 10 miles of a known nest site.

Swainson's hawk foraging habitat value is greater in large expansive open space and agricultural areas than in areas which have been fragmented by agricultural-residential or urban development. The project is located adjacent to potential foraging habitat; however, construction will occur adjacent to the existing roadway and no loss of foraging habitat is expected as a result of this project. The mitigation measures discussed above will ensure that impacts to Swainson's hawk are ***less than significant***.

Plate IS-7: Swainson's Hawk Nest Sites



CALIFORNIA TIGER SALAMANDER

California tiger salamander (CTS) require suitable aquatic habitat for breeding and upland habitat for aestivation. Aquatic breeding habitat includes vernal pools and seasonal and perennial ponds in grassland and oak savannah plant communities from sea level to approximately 3,600 feet. Aquatic breeding ponds are almost always found in grassland. CTS breeding ponds have rarely been observed in grasslands with scattered oak trees or in scrub or chaparral habitats. CTS spend most of their lives in upland habitats that consist of grassland and oak savannah with burrows of small mammals. CTS most commonly use burrows in open grassland or under isolated oaks, and less commonly in oak woodlands. CTS have been observed up to 1.3 miles from breeding ponds, though this is a greater distance than is typical. CTS remain in their upland burrows through the dry summer and fall months. Adults emerge from their burrows on rainy nights to feed and migrate to breeding ponds once fall or winter rains begin. Adults migrate back to upland burrows from one to 8 weeks. Metamorphosed juveniles leave the breeding sites in late spring or early summer. Adults may continue to come out nightly to feed for approximately 2 weeks after returning to burrows. Overland movements occur during the night throughout the juvenile and adult phases (50 CFR Part 17).

CTS are not known to occur north of the Cosumnes River (50 CFR Part 17). As stated in 50 CFR Part 17, “Although the area between Butte County and the Cosumnes River contains suitable vernal pools and has been surveyed extensively, the species has only been recorded along the southern edge of Sacramento County, south of the Cosumnes River (CNDDB, 2003)”.

There are no CNDDB records for CTS within 5 miles of the project corridor. The nearest occurrence is approximately 13 miles south of the project within the Carbondale Quadrangle (CNDDB Occurrence No. 424). Critical habitat for CTS is approximately 15 miles south of the study area. CTS are not covered as a federal listed animal species under the *Recovery Plan for Vernal Pool Ecosystems for California and Southern Oregon* (USFWS, 2005).

The nearby vernal pools and grassland surrounding the vernal pools provide marginal breeding habitat; however, the study area occurs outside of the known CTS range. Given that the site is approximately 13 miles north of the nearest documented occurrence and that CTS are not know to occur north of the Cosumnes River, the project is not expected to impact CTS or its habitat. Impacts related to CTS are considered ***less than significant***.

WETLANDS AND OTHER SURFACE WATERS

The USACOE regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). “Discharges of fill material” is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-

development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the "normal circumstances" for the site.

VERNAL POOL HABITAT

The undulating topography and soils at the project site combine with the Sacramento Valley climate to create vernal pool wetlands. Vernal pools are seasonally inundated depressions with an impermeable soil layer that causes water to be retained for extended periods of time. The impermeable layer is formed in clay soils derived from the weathering of ancient volcanic mudflows of the Sacramento Valley. The dense clay soils cause rainwater to pool in shallow depressions during the winter and early spring.

Water may fill and evaporate from vernal pools several times throughout the season, or the pool may remain full throughout the entire rainy season. As spring progresses, water evaporates and is consumed by emerging plants beginning the long dry period. Repeated evaporation of seasonal rains alters the soil chemistry. Specialized plants and animals are adapted to survive these drastic cycles of wetting and drying and the unique soil chemistry of the pools.

Wetlands have been recognized for their importance in regulating floods, cleansing runoff, and providing valuable habitat. Vernal pools may also contain threatened and endangered plant and animal species. Topographically well defined, deeper pools are dominated by species including spikerush, coyote thistle, popcorn flower, woolly marbles, and downingia. Shallower, less well defined pools are vegetated by similar species, but grasses such as Mediterranean barley and ryegrass are also common. Vernal pools provide habitat for a variety of aquatic invertebrates, primarily crustaceans and insect larvae, including the federally listed vernal pool tadpole shrimp and vernal pool fairy shrimp. Shorebirds, waterfowl, and other water birds often forage and rest in vernal pools during the winter and spring. Vernal pools may also provide breeding habitat for the western spadefoot toad, Pacific chorus frog, and western toad.

The number of vernal pools has been substantially reduced throughout California's Central Valley. Their continued loss is of local and regional concern. Due to the unique

species that depend on them, vernal pools have become a significant resource recognized at the national level.

A wetland delineation was prepared for the portion of the project located north of White Rock Road by Sacramento County staff biologist Eric Stackhouse on May 20, 2010. Wetland delineation information for the south side of White Rock Road was prepared for the EIR/EIS of the Rio del Oro project. These reports are included as Appendix A of this document. Applicable findings from the delineations are discussed below. The discussions are separated into north and south of White Rock Road because the areas were surveyed separately.

NORTH

Two vernal pool wetlands totaling 0.185 acres were identified on the north side of White Rock Road. These features are illustrated on Plate IS-8. The vernal pools were identified as such due to the presence of venal pool obligate plant species such as popcorn flower (*Plagiobothrys stipitatus*), monkeyflower (*Mimulus tricolor*) and downingia (*Downingia bicornuta*). These vernal pools are isolated and lack a surrounding complex of pools. No listed plant species were identified during the site visit. These vernal pools were created by the grading of the road/fire break and are considered degraded.

White Rock Road is adjacent to dredge tailings and slickens, which are soil deposits that were created by dredge mining. The USGS Buffalo Creek 7.5 Quadrangle Map shows water features in these slickens areas between the cobble tailings; however, these water features are no longer present, having been altered since the maps were drawn in 1967. Willows and cottonwood trees have grown in some of the slickens areas. Though the cottonwoods and willows are typically associated with wetlands, the herbs and some of the shrubs (*Baccharis pilularis*) found in the understory on the slickens areas, are plants associated with dryer upland habitat. In areas where the willows and cottonwoods are healthy and reproducing, there may be water in the soil too deep to influence the herb layer, but shallow enough to support the willows and cottonwood trees. In some areas the cottonwood trees are dying and not being replaced with new cottonwoods; therefore, they may be remnants of a wetter condition that no longer exists. Within the area surveyed along White Rock Road the upland plants equaled or outnumbered the percentage of wetland associated plants; thus, they were not delineated as wetlands.

There are ditches within the project APE in the western half of the area surveyed. These ditches have more than 50% upland plants and do not have a hydrological connection to jurisdictional waters. The ditches either end abruptly without an outlet or the water sheet-flows into a field. The ditches may function as drains during the rainy season and they are dry the remaining portion of the year. The ditches may have been constructed to move water when the area was being mined in the 1940s-1960s. The ditches are believed to be non-jurisdictional because they lack a hydrological connection to waters of the U.S. and they lack wetland plant species to be considered wetlands.

SOUTH

Wetlands located south of White Rock Road were delineated as part of the Rio del Oro Specific Plan project. The delineation identified a total of 56.63 jurisdictional acres and 12.95 isolated acres for a total of 69.58 acres of wetlands within the Rio del Oro Specific Plan area. The wetlands identified include vernal pools, ponds, seasonal wetland swales, seasonal wetlands, and ephemeral drainages. The Rio del Oro project would directly or indirectly impact a total of 30.08 acres of these wetlands. As mitigation for these impacts the EIR/EIS recommended a Wetland Mitigation and Monitoring Plan to be approved by USACE, the Central Valley RWQCB, and the City. The plan includes the preservation of 28.73 acres of wetlands and the creation of 47.05 acres of wetlands.

Seven wetlands, including vernal pools, were identified within or dissecting the project's APE. These features are illustrated on Plate IS-8. Four of these features are considered isolated while the remaining three are considered non-isolated. In total 0.3324 acres of wetland features were delineated within 250 feet of the southern edge of pavement of the existing White Rock Road. A total of 0.1050 acres of these features were delineated within the project's APE.

Mitigation which requires the acquisition of all necessary permits is recommended in order to reduce impacts related to the loss of 0.29 acres (0.185 acres on the north side and 0.1050 acres on the south side) of wetlands. With mitigation impacts are considered ***less than significant***.

Plate IS-8: Wetlands North and South of White Rock Road

NATIVE OAK TREES

The City of Rancho Cordova's General Plan Natural Resources Element has a number of policies intended to protect and preserve native oak and landmark trees within the City. The following goals and policies of the City's Natural Resources Element are applicable to this discussion.

Goal NR.4: Encourage the planting and preservation of high-quality trees throughout the City.

Policy NR.4.1 - Conserve native oak and landmark tree resources for their historic, economic, aesthetic, educational, and environmental value.

- Action NR.4.1.1 - Implement the City's Tree Preservation and Protection Ordinance (and update as necessary) to establish minimum requirements for preserving native trees and landmark trees in the City, including a definition of the size, species, and age requirements of landmark, oak, and other trees to be protected and/or replaced.

- Action NR.4.1.2 - Where feasible, require underground utility lines that are in close proximity to oaks and other landmark trees to be designed and installed to minimize impacts to trees. Work with the utility provider(s) to coordinate transmission line location and other potential impacts associated with the undergrounding of the utilities.

- Action NR.4.1.3 – Establish development guidelines that require all oak habitat to be avoided to the maximum extent feasible. When avoidance is not possible, require mitigation efforts that result in preservation of in-kind habitat in the Planning Area.

Policy NR.4.4 - Prior to the approval of any public or private development project in areas identified or assumed to contain trees, the City shall require that a determinate survey of trees species and size be performed. If any native oaks or other native trees six inches or more in diameter at breast height (dbh), multitrunk native oaks or native trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a certified arborist to be in good health are found to occur, such trees shall be avoided if feasible. If such trees cannot be avoided, the project applicant shall do one of the following:

- All such trees shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the City of Rancho Cordova for approval prior to removal of trees; or,

- The project applicant shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City of Rancho Cordova. The mitigation plan shall be subject to the approval of the City.

• If the City of Ranch Cordova adopts a tree preservation ordinance at any time in the future, any future development activities shall be subject to that ordinance instead.

The City has not yet adopted a Tree Preservation and Protection Ordinance as referenced above and defers to the Sacramento County Tree Ordinance (Chapter 19 of the County Code).

An Arborist Report was prepared for the project by Sacramento County Staff Arborist Todd Smith, ISA Certified Arborist #WE-6782A. The report identified all native oak trees six inches or greater dbh located within the project APE as shown on Plate IS-3. A total of 39 trees (interior live oak/*Quercus wislizenii*, blue oak/*Quercus douglasii*, and valley oak/*Quercus lobata*) were identified and tagged in the field. The species, diameter at breast height (dbh), and condition of these trees is detailed in Table IS-8 below.

A total of 145 dbh inches of valley oak, 392 dbh inches of interior live oak, and 72 dbh inches of blue oak will be removed as a result of this project. Of the trees listed above two were identified as being in poor condition. Typically trees that have been classified by a certified arborist as being in poor condition do not require replacement or compensation for removal. To assess the worst case scenario this analysis quantifies the impact of removing all of the trees that have been identified as being within the project's APE. It should be noted that the APE extends beyond the limits of project construction; therefore, the project may not result in removal of all of these trees. Further, the ultimate determination of tree removal will be made upon final design of the project.

Table IS-8: Oak Tree Inventory

Tree Number	Species	Condition	DBH (*multi-trunk)
13340	*Quercus wislizenii*	Fair	*33
13339	*Quercus wislizenii*	Poor	*18
13338	*Quercus douglasii*	Good	27
13337	*Quercus wislizenii*	Fair	12
13336	*Quercus wislizenii*	Fair	20
13335	*Quercus lobata*	Good	19
13334	*Quercus wislizenii*	Good	7
13333	*Quercus wislizenii*	Good	8
13332	*Quercus wislizenii*	Fair	*25
13331	*Quercus wislizenii*	Fair	*25
188	*Quercus wislizenii*	Good	*10
189	*Quercus wislizenii*	Fair	*10

Tree Number	Species	Condition	DBH (*multi-trunk)
13330	*Quercus wislizenii*	Fair	*17
13329	*Quercus lobata*	Good	*29
13328	*Quercus wislizenii*	Fair	*15
13327	*Quercus lobata*	Fair	10
13326	*Quercus lobata*	Good	10
190	*Quercus douglasii*	Fair	7
191	*Quercus wislizenii*	Good	*36
194	*Quercus wislizenii*	Good	7
195	*Quercus wislizenii*	Fair	*9
196	*Quercus wislizenii*	Good	*14
197	*Quercus wislizenii*	Fair	9
198	*Quercus wislizenii*	Fair	*12
199	*Quercus wislizenii*	Fair	*11
200	*Quercus wislizenii*	Fair	*15
201	*Quercus wislizenii*	Fair	6
202	*Quercus wislizenii*	Fair	*18
203	*Quercus wislizenii*	Good	16
204	*Quercus lobata*	Fair	14
205	*Quercus douglasii*	Good	8
206	*Quercus lobata*	Fair	21
207	*Quercus wislizenii*	Good	*14
208	*Quercus douglasii*	Good	6
209	*Quercus wislizenii*	Good	*19
210	*Quercus douglasii*	Good	6
211	*Quercus wislizenii*	Good	6
1	*Quercus lobata*	Fair	42
212	*Quercus douglasii*	Poor	18
Total dbh inches			**609**

When adjusted to reflect the two trees that have been listed in poor condition, ultimate dbh inches of native oak trees that will be removed as a result of this project is 573. Mitigation has been recommended to require compensation for the removal of the onsite native oak trees. Protective mitigation measures have also been included to ensure that onsite native oak trees that remain are not degraded during construction.

With mitigation impacts related to removal of these trees are considered ***less than significant***.

CULTURAL RESOURCES

Under CEQA, lead agencies must consider the effects of their projects on historical resources. The California Environmental Quality Act (CEQA) defines a "historical resource" as a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, and any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5[a] of the Guidelines). Public Resources Code (PRC) Section 5024.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for CRHR eligibility. According to PRC Section 5024.1(c)(1–4), a resource may be considered *historically significant* if it retains integrity and meets at least one of the following criteria. A property may be listed in the CRHR if the resource:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. Embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values; or

4. Has yielded, or may be likely to yield, information important in prehistory or history.

As noted above, in order to be considered eligible, a resource must meet one of the above stated criteria and also retain integrity. Integrity has been defined by the National Park Service as consisting of seven elements: location, design, setting, materials, workmanship, feeling, and association.

In order to determine whether the proposed project could impact a historical resource, a cultural resources assessment for the proposed project was conducted by Solano Archaeological Services. The following analysis contains portions of, and is based on, this review (Citation: Solano Archaeological Services. July 2010. *Cultural Resources Inventory for the White Rock Road Widening Project: Sunrise Boulevard to Nimbus Road, Sacramento County, California*).

CULTURAL CONTEXT

ETHNOGRAPHIC SETTING

The project area falls within the ethnographic territory of the Valley Nisenan. The Nisenan are speakers of a language related to Maidu and Konkow, which collectively are considered Maiduan languages. These languages and other found in the Pacific Northwest have been classified as members of the hypothetical Penutian language family. Nisenan speaking people occupied the eastern side of the central and lower Sacramento Valley from below the confluence of the American and Sacramento Rivers in the south to the Feather River at Marysville in the north and the adjoining foothills and mountains of the Sierra Nevada. Nisenan society was organized around the village community referred to occasionally as a "tribelet" or "community group". These organizations were generally composed of one or more settlements that were typically occupied by related family groups. Leadership is thought to have been largely patrilineal and heritable, passed usually from father to son, but occasionally when no suitable son was available as an heir, to another relative.

Nisenan subsistence was based upon "naturally" occurring resources including a broad spectrum of plants, animals and fish. Evidence indicates that many Californian groups, including the Maiduan-speaking people, used limited proto-agricultural or –horticultural practices including chaparral, range and forest burning, plant tending, transplanting, weeding, and even some limited cultivation and planting (especially tobacco). The observation has been made that the burning of range land and woodland may have served as a form of game management or possibly even a kind of herding or baiting technique.

HISTORICAL SETTING

EARLY EXPLORATION AND SETTLEMENT

The earliest Euro-Americans to venture into the project region included Gabriel Moraga and a group of Spanish explorers in 1806–1808 who ventured into the vicinity of Sacramento, and fur trappers and explorers associated with the Hudson's Bay Company in the 1820s. Jedediah Smith, also with Hudson's Bay Company at the time led a group of trappers along the edge of the foothills to the American River in search of a pass over the Sierra Nevada in 1826. Kit Carson and John C. Fremont crossed the mountains near Lake Tahoe and descended to Sutter's Fort traveling along the South Fork of the American River in 1844. These expeditions, however, had little lasting impression on the landscape or the native inhabitants of the region.

Historic-era developments in the project site vicinity appear to have been few prior to the discovery of gold at Sutter's Mill in El Dorado County and the ensuing Gold Rush. The project area was originally part of the *Rancho Rio de los Americanos* Mexican land grant—more than eight leagues (about 35,500 acres) granted to William Leidesdorff and purchased by Joseph L. Folsom in 1848 after Leidesdorff's death. This grant extended

from the eastern border of John Sutter‘s New Helvetia settlement (east of Sacramento) along the south bank of the American River to the western edge of present-day Folsom.

TRANSPORTATION

Although numerous roads were well-established in the project area by the late 1840s, one of the most notable, albeit short-lived routes passing through the area was the trail used by the Pony Express. This route had been established and heavily traveled by miners who were departing from Sacramento and heading for the Sierra Nevada foothills, along today‘s Folsom Boulevard. Several way stations appeared along this route through current-day Rancho Cordova. These stations were often named after proprietors or were indicative of their distance from Sacramento (e.g., Fifteen Mile House). The most famous of these was Mills Station, which was constructed in the early 1900s and subsequently used as a post office, a grocery store, and a library. The building was later restored by Sacramento Regional Transit and is presently used as administrative offices at the light-rail station located near Mather Field Road and Folsom Boulevard.

White Rock Road, visible on an 1856 General Land Office (GLO) map, was named the Sacramento-Placerville Road (also labeled as the Placerville Road). Once the main route from Sacramento to Placerville, White Rock Road was designated part of the Lincoln Highway, the nation‘s first interstate automobile route, in the early decades of the twentieth century. The Lincoln Highway, consisting of a route patched together from pre-existing roads and newly built “seedling miles” intended to spur economic growth, started in Times Square, New York City, and ended in Jack London Square in Oakland. At the time, the federal government had nothing to do with the designation and construction of the route. The establishment of the Lincoln Highway Association in 1913 and all its activities was primarily the doing of Henry Joy, President of the Packard Motor Car Company, and Carl Fisher, owner of the Indianapolis Motor Speedway. Mr. Joy and Mr. Fisher, and other automobile manufacturers and industrialists of the day, had a vested interest in the growth and improvement of roadways in the United States; a better and more extensive road network meant increased sales.

According to Mr. Bob Dieterich, president of the California chapter of the Lincoln Highway Association (a historical society with no ties to the commercial Lincoln Highway Association founded by Henry Joy), there were two established Lincoln Highway routes through the Sierra Nevada. One, referred to as the Sierra Nevada Northern Route, roughly paralleled present-day I-80. The second Sierra route, the Sierra Nevada Southern Route, generally followed the alignment of present-day Highway 50, including White Rock Road. Along the entire route of the highway from New York to Oakland, continual improvements, modifications, and realignments have resulted in a network of road sections associated with the route at various periods.

White Rock Road represents a portion of the original 1913-designated route and remained part of this privately-designated and maintained road system until the 1920s. In 1921 the federal government passed the Federal Highway Act which, like a similar act passed in 1916, provided $75 million of matching funds to the states for highway

construction. However, unlike the 1916 Act, the 1921 Act required the states to identify 7 percent of its total mileage was "primary"; only these roads would be eligible for federal funds. The Lincoln Highway, already an established and maintained route, was ideal for designation as a primary road worthy of federal funding. By the late 1920s, the Lincoln Highway in California was no longer a private enterprise and had been fully absorbed into the federal highway system.

MINING

By the latter decades of the 19th century individual miners and small operations of the Gold Rush-era began to be phased out with large companies consolidating multiple claims in and around the project vicinity. Access to the deeper and/or more extensive gold deposits the earliest miner's could not effectively pursue required the use of ground sluicing, low and high-pressure "hydraulicking", and drifting, all of which required the movement of large quantities of water. The most prominent firm working in the project vicinity following the initial "rush" was The Natoma Mining Company whose ditch systems provided steady water supplies from the American River to many of the regional mining districts.

However, smaller claims were still being worked by both Euro-American and Chinese miners employed by smaller independent companies. The Natoma Mining Company also employed Chinese on their lands during the mid-late 1800s. The Natoma Mining Company, through persistent claim acquisition and consolidation efforts, effectively ended small, independent mining company operations in the region and by the turn of the century smaller drift and ground sluicing operations had been primarily replaced by the larger dredging operations. The first mention of large scale dredging was the Doan Mining Dredger that operated near Mississippi Bar (near present-day Folsom) in 1894. However, this operation was apparently short-lived. W. P. Bonright and Company was the first to establish a successful dredging operation at their newly acquired property at Mississippi Bar.

The Natoma Mining Company, reorganized as Natomas Consolidated of California, acquired all of the smaller dredging operations by 1916 and operated until 1962, with a short period during World War II when operations were suspended. Other operations in the project site and vicinity included those of Folsom #2 in the vicinity of the town of Folsom in the early 1900s, and those of the General Dredging company that operated a small "doodlebug" drag line dredge between 1938 and 1942, south of Folsom and within and in the vicinity of the project area. These dredges left massive tailings piles in their wake which can be found directly within the project area and throughout the region covering thousands of acres.

AVIATION

As the dredge mining operations in the Rancho Cordova region declined in the mid-20th century, The Natomas Company began selling parcels of dredged land to Aerojet beginning in 1950. Aerojet subsequently leased approximately 1,700 acres to McDonnell Douglas Corporation (MDC), which initially constructed rocket-engine test

stands, buildings, and other facilities in the Administration, Alpha, and DM-14 areas of the site. Other areas, including the Alpha Complex, Beta Complex, Kappa Complex, Gamma Complex, and Sigma Complex, were subsequently developed. These various facilities were used for assembly and testing of rocket systems through 1969. Several parcels were leased to the National Aeronautics and Space Administration (NASA) from 1962 to 1972 for rocket engine tests.

Aviation facilities first came to the project vicinity in 1918 when the newly-created U.S. Army Air Corps constructed Mills Field, later renamed Mather Field, to serve as a flight training school. After World War II, the base was the only aerial navigation school remaining for the U.S. military and its allies. A Strategic Air Command B-52 squadron was assigned to the air force base from 1958 through 1989, when the base was decommissioned under the federal Base Realignment and Closure Act. The closure of the base prompted the County Board of Supervisors to examine the potential for converting the base to a public-use airport facility. The Air Force transferred the base to the County, and in May 1995 Mather Airport was opened. Other parts of the former military base were redeveloped for use as housing and a business park.

Pre-Field and Fieldwork Research and Methodology

Research for this project was conducted in two phases. The first phase consisted of an archival search of available records, repositories and other sources of information applicable to the project area. The second phase consisted of fieldwork; project personnel conducted a survey of the project area to inventory any historic or archaeological resources. The two phases of research are discussed below.

ARCHIVAL RESEARCH

A record search was performed at the North Central Information Center (NCIC) of the California Historical Records Information System to identify known resources in the project area. The record search indicated that there have been seven cultural resources studies conducted within a quarter-mile radius of the project site. As a result of these studies a total of four cultural resources sites were located within the quarter-mile search radius. All of the previously recorded resources are historic resources that occur within the project's area of potential effect. Each of the previously documented resources reflects one main activity type or "theme" of historic development in the region: mining.

FIELDWORK

Based on the above noted sensitivities for cultural resources and recommendations from the NCIC, a Cultural Resources Inventory was performed on the project site. Solano Archaeological Services was enlisted to complete the necessary cultural resources assessment.

To complete an intensive field inventory of the project area, a systematic approach to the field research was utilized. The entire project was surveyed utilizing pedestrian

transects spaced no more than 15 meters (50 feet) apart. Previous surveys of the project area have resulted in large portions of the project having been inventoried for cultural resources. These areas were revisited to assess the adequacy of previous studies, site condition (if any were noted), and impacts that may have resulted since the sites were originally documented.

The recording of undocumented archaeological resources focused on the extent, content, and cultural/temporal context of each site with specific attention being paid to the condition of each resource and evidence of past or ongoing impacts. Global Positioning System (GPS) equipment with sub-meter accuracy was employed to obtain accurate resource locational data and sites were also visually plotted on the Buffalo and Citrus Heights USGS 7.5 minute topographical quadrangle. All site information and updates to previous documentation was recorded on DPR Series 523 Primary and Archaeological Site forms as necessary.

SURVEY RESULTS

LINCOLN HIGHWAY (WHITE ROCK ROAD)

The portion of White Rock Road (Lincoln Highway) situated within the project area is considered a cultural resource per CEQA criteria. As discussed in the Historical Setting section, the Lincoln Highway was the nation‘s first designated interstate roadway and played a major role in the formation of the federal interstate highway system and the advent of the automobile as a major cultural and economic influence in the United States. While the Lincoln Highway, as a system, is presently listed on the CRHR and the National Register of Historic Places (NRHP) as a significant cultural resource, consideration of individual portions of the route as significant (per the CRHR) depends largely on the present-day physical and visual integrity of the discreet section. In some areas of California, little has changed in terms of the physical setting and condition of the roadway and such portions can be considered eligible for listing on the CRHR. The portion of White Rock Road within the project area subject to project-related impacts, on the other hand, retains little of the physical integrity or visual setting that convey the main period of significance (circa 1913–1930) of the Lincoln Highway in California. The probable widening of White Rock Road during the latter twentieth century, re-paving, mid-20th century dredge mining, and nearby commercial and residential development in the immediate vicinity of White Rock Road has destroyed or at least dramatically impacted the look and feel of the roadway since it was in use as the Lincoln Highway.

NEWLY DISCOVERED RESOURCE

SAS archaeologists identified one previously undocumented cultural resource within the project area. The resource consisted of a deposit of tin and aluminum food and beverage cans and miscellaneous fragments of metal. Based on can types, the deposit appears to date from a broad temporal span and likely represents a local dump site utilized over a number of years. Aluminum and tin (steel) beverage cans and sanitary food cans at this site date to as late as the 1960s with others possibly dating to as early as the 1930s. Although most of the cans and other artifacts in this deposit date to about

the time that mine dredges were being used in the general area, this deposit is not necessarily related to those activities and was noted in area where tailings exist but were apparently leveled or otherwise disturbed prior to the cans and other materials being deposited; suggesting the deposit occurred after mining activities had already ceased.

CULTURAL RESOURCES IMPACT CONCLUSION

PREVIOUSLY-IDENTIFIED CULTURAL RESOURCES

Previous research efforts and the SAS investigation documented the presence and condition of four cultural resources within the project area. These consist of the remains of mine dredge tailings and two refuse deposits. Although associated with important mining activities, these tailings deposits are ubiquitous throughout the region. In addition, the tailings within the project area have been leveled, graded, or otherwise disturbed by subsequent activities including the construction and maintenance/improvement of White Rock Road. Consequently, due to their lack of integrity neither of these resources is recommended eligible for CRHR listing.

The two previously-identified refuse deposits cannot be directly associated with mining activities or any other potentially significant historical event or persons. They are also relatively late (20th century) and do not appear to retain any important historical or scientific data. As a result, they are also not recommended eligible for CRHR listing.

NEWLY IDENTIFIED CULTURAL RESOURCES

As with the previously identified refuse deposits, the newly recorded refuse deposit cannot be directly associated with historic-era mining activities or any other historically important event or persons. It also does not appear to retain any important historical or scientific data and as a result is not recommended eligible for CRHR listing.

The Lincoln Highway route (present-day White Rock Road) segment situated within the project area no longer retains the physical character or visual setting that convey its period of significance. Consequently, this resource is also not considered eligible for the CRHR.

CONCLUSION

There was no significant prehistoric, ethnohistoric or historic period resources discovered within the limits of the project's area of impact. As always, there is the potential for the existence of buried archaeological materials within the project area. CEQA requires that lead agencies protect both known and unknown cultural resources; therefore, mitigation is recommended to ensure that in the event that cultural resources are discovered on the project site during implementation phases that all work shall be halted until a qualified archaeologist may evaluate the resource encountered.

With mitigation, environmental impacts to potentially sensitive cultural resources are considered **less than significant**.

HAZARDOUS MATERIALS

A Phase 1 Environmental Site Assessment (ESA) was performed by Sacramento County Environmental Management Department (EMD) for White Rock Road from Luyung Drive to the eastern Sacramento County Line (*A Phase 1 Environmental Site Assessment White Rock Road Widening Project White Rock Road from Luyung Drive to East County Line*, October 15, 2008 revised March 10, 2009). The study encompassed an approximately 9.5-mile-long area defined as a corridor approximately 600-feet wide measured 300 feet north and south of the centerline of White Rock Road. At the intersection of White Rock Road and Grant Line Road two paths were studied: one along the existing path of White Rock Road and the other along a gentle curve from Grant Line Road to its merger again with the existing White Rock Road.

The assessment conducted a field reconnaissance, a review of environmental databases provided by Environmental Data Resources Inc., a review of files at the Sacramento County Environmental Management Department and other governmental agencies, a review of historical aerial photographs and USGS topographic maps, and interviews with regulatory personnel familiar with the project area. The ESA did not include a collection of groundwater samples or evaluation of potential flood hazards along the corridor or within its vicinity.

With the exception of Aerojet General Corporation (AGC) no known or potential hazardous materials contamination were identified on or adjacent to the project corridor. The hazardous materials related to the AGC property are discussed below.

AEROJET GENERAL CORPORATION AREAS

The WRR North Landfill generally is located between the existing WRR to the south; Old White Rock Road to the north; Grant Line Road to the east; and, a fenceline to the west. However, wastes and landfilled materials are irregularly-shaped and are not continuous across the entire land area located between the preceding physiographic features.

The former landfill is undergoing remediation for underground contamination. And, although the landfill is located outside the boundaries of this project, a number of monitoring wells, extraction wells and recharge wells are located on both sides of White Rock Road (see Plate IS-9). EMD staff noted wells as close as 40 to 60 feet from the existing pavement. The project has the potential to encounter these wells.

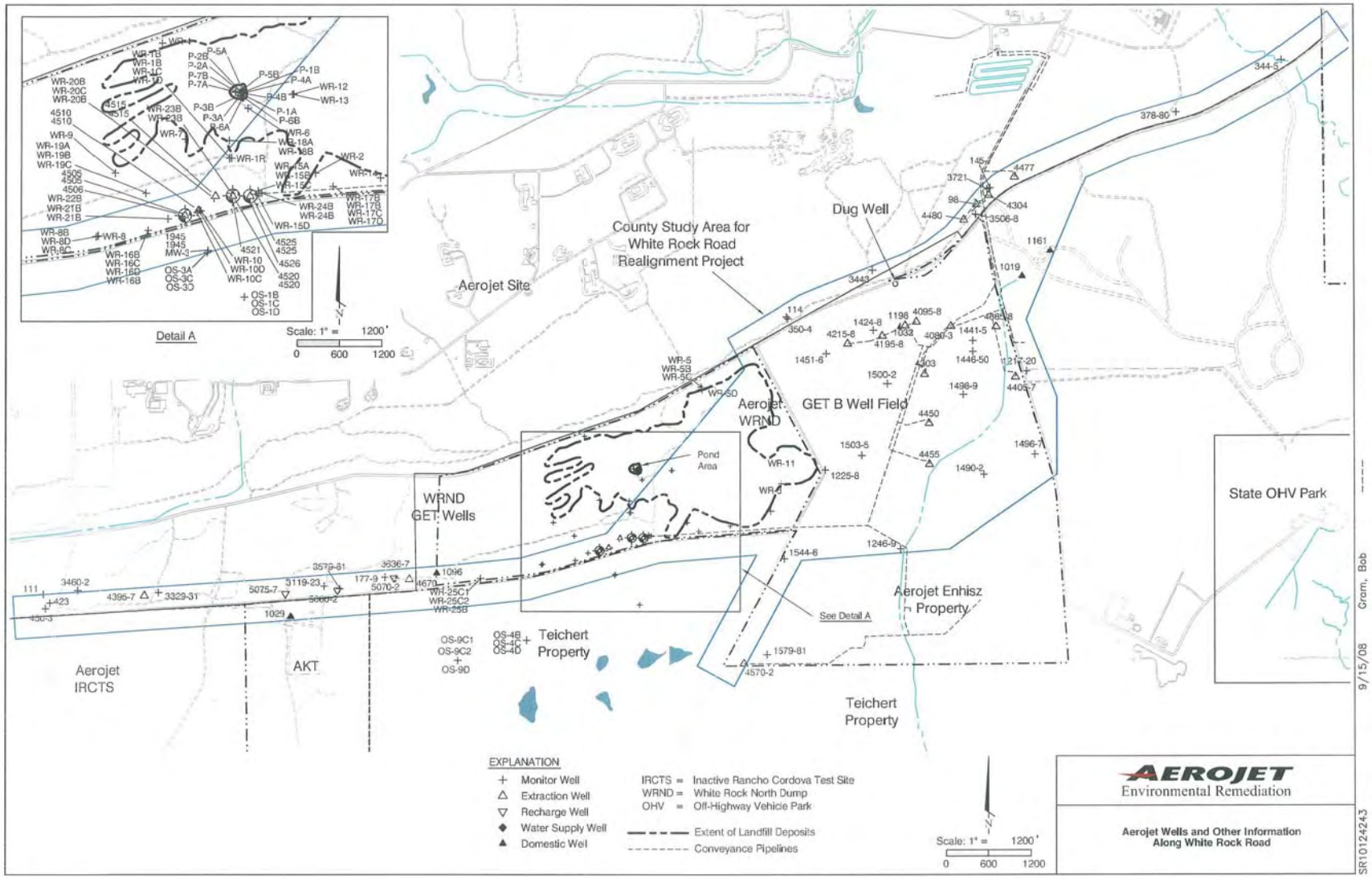
The ESA identified an illegal dump site located adjacent to the south side of White Rock Road east of the City limits. The site includes rusted automobiles, commercial batteries, household appliances and furnishings, and used tire casings. Although this site was identified outside the limits of this project, its presence suggests that there is potential to encounter as yet unidentified sites. To minimize impacts associated with

illegal dump sites the project proponent should prepare a contingency plan to provide guidance on how to properly dispose of and remediate materials that are encountered unexpectedly.

The Phase 1 ESA also identified hazardous materials contaminants in groundwater beneath Aerojet General Corporation and neighboring non-AGC-owned land areas that consist of the chlorinated solvent trichloroethylene (TCE). Staff also noticed AGC groundwater remedial equipment, systems and buried pipelines located near White Rock Road. To minimize impacts associated with this equipment the project should destroy and reconstruct any impacted monitoring, extraction and recharge wells to the satisfaction of the California Department of Toxic Substances Control and the California Regional Water Quality Control Board.

Mitigation has been included to ensure project compliance with the hazardous materials avoidance efforts as discussed above. With mitigation impacts are considered ***less than significant***.

Plate IS-9: Aerojet Environmental Remediation



CLIMATE CHANGE

The principal greenhouse gases (GHGs) that enter the atmosphere because of human activities are CO_2 (carbon dioxide), CH_4 (methane), N_2O (nitrous oxide), and fluorinated gases. From 1750 to 2004, concentrations of CO_2, CH_4, and N_2O have increased globally by 35, 143, and 18 percent, respectively. "In order to stabilize the concentration of GHGs in the atmosphere, emissions would need to peak and decline thereafter. The lower the stabilization level, the more quickly this peak and decline would need to occur. Mitigation efforts over the next two to three decades will have a large impact on opportunities to achieve lower stabilization levels." [1]

ASSEMBLY BILL 32

In September 2006, Assembly Bill (AB) 32 was signed by Governor Schwarzenegger of California. AB 32 requires that California GHG emissions be reduced to 1990 levels by the year 2020. It is a comprehensive bill that requires the California Air Resources Board (ARB) to adopt regulations requiring the reporting and verification of statewide greenhouse gas emissions, and it establishes a schedule of action measures. AB 32 also requires that a list of emission reduction strategies be published to achieve emissions reduction goals.

SENATE BILL 375

On September 30, 2008, Senate Bill (SB) 375 was signed by Governor Schwarzenegger of California. SB 375 combines regional transportation planning with sustainability strategies in order to reduce greenhouse gas emissions in California's urbanized areas. Existing law requires the regional transportation planning agency to adopt a Regional Transportation Plan. Within Sacramento County that agency is the Sacramento Area Council of Governments (SACOG). SB 375 requires that the Regional Transportation Plan include a "sustainable communities strategy". To this end, the ARB must provide SACOG and other regions with GHG emissions reduction targets by June 30, 2010. The Regional Technical Advisory Committee formed to generate recommendations published their final report on September 29, 2009. The report recommends that the Air Resources Board adopt a uniform statewide target expressed as a per capita reduction metric from 2005 levels.

SIGNIFICANCE CRITERIA

The California Office of Planning and Research, the agency responsible for development and updates to the CEQA Guidelines, has published a draft set of guidelines for climate change. The Natural Resources Agency adopted the

[1] Intergovernmental Panel on Climate Change, United Nations (IPCC). "Climate Change 2007: Mitigation of Climate Change. Contribution of Working Group III to the Fourth Assessment Report of the IPCC", 2007.

amendments on December 30, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010. The guidelines do not include a numeric significance threshold. One could use the emissions reduction targets established through AB 32, but the measures listed in the published Scoping Plan do not clearly identify the reduction targets that will apply specifically to local government. The Scoping Plan states that local government should set the same ultimate targets as those set forth in AB 32, but does not provide the details necessary to understand how much of the target will be achieved through State actions (such as the low-carbon fuel standard) and how much will be achieved by local action.

PROJECT IMPACTS

Much of the surrounding land within the immediate project area is undergoing environmental review or has undergone environmental review for various development projects. The area will experience an increase in automobile travel as land redevelops into uses that generate more traffic than the existing uses. The project would correct existing safety hazards and provide additional capacity for existing and future development and shift some of the existing and future traffic from U.S. 50 to White Rock Road and other roadways. No new trips will be created as a result of this project.

The project would increase the capacity of the roadway such that more vehicles would be traveling on White Rock Road. Those vehicles would generate CO_2, CH_4, and N_2O emissions and fluorinated gas emissions associated with refrigerants used in vehicular air conditioning systems. These emissions are expected to occur as a result of the nearby development and not as a result of the project.

The proposed project would not create new GHG emissions. The project's contribution to cumulative climate change impacts is considered ***less than significant***.

ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures A, B, and D are critical to ensure that identified significant impacts of the project are reduced to a level of less than significant. Pursuant to Section 15074.1(b) of the CEQA Guidelines, each of these measures must be adopted exactly as written unless both of the following occur: (1) A public hearing is held on the proposed changes; (2) The hearing body adopts a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.

MITIGATION MEASURE A: VERNAL POOL SHRIMP

Prior to construction within 250 feet of the vernal pools on the project site, conduct determinate surveys, according to U.S. Fish and Wildlife Service approved protocol, for listed vernal pool branchiopods. In the absence of determinant surveys, presence of these species shall be assumed.

1. If determinate surveys show that no listed vernal pool branchiopods are present in the vernal pool(s), no further mitigation is required.

2. If presence is assumed or confirmed, establish minimum 250-foot buffers with fencing around the perimeter of shrimp habitat to be preserved. Avoid activity within fenced area(s).

    a. Consultation with the U.S. Fish and Wildlife Service shall be required for a reduction in the 250-foot buffer.

    b. If direct impacts (fill or excavation) to the pools are to occur, consultation with the U.S. Fish and Wildlife Service and U.S. Army Corps of Engineers to obtain permits and establish compensatory mitigation for impacts to vernal pool species will be required.

MITIGATION MEASURE B: VALLEY ELDERBERRY LONGHORN BEETLE

In order to reduce VELB impacts to a less than significant level the following mitigation measures, consistent with USFWS guidelines, will be required:

1. For construction prior to obtaining the applicable permits allowing removal of the elderberry plants, protective measures shall apply. Prior to initiating construction, the following measures shall be completed:

    a. Temporary construction fencing and flagging shall be installed at least 100 feet outside the edge of the driplines of the elderberry plants. In areas where encroachment on the 100-foot buffer has been approved by USFWS, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant and provide documentation of USFWS approval of the reduced setback.

    b. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.

    c. Erect signs every 50 feet along the edge of the avoidance area with the following information: “This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment.” The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.

d. Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

2. Prior to construction within the 100-foot buffer area (or lesser buffer, as approved by USFWS) established around the elderberry plants implement one of the following methods (or a combination of the following two methods) to reduce impacts to the Valley Elderberry Longhorn Beetle to a less than significant level:

Either

a. Elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level shall be transplanted to a conservation area approved by the USFWS. The project applicant shall consult with the USFWS on all transplantation activities and obtain all applicable permits.

And/Or:

b. The project applicant shall compensate for the loss of elderberry plants on the site to the satisfaction of the USFWS and shall obtain any/all applicable permit(s) from the USFWS.

MITIGATION MEASURE C: SWAINSON'S HAWK AND OTHER NESTING RAPTOR HABITAT

If ground disturbing activity (i.e. clearing, grubbing, or grading) is to occur 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 ½ mile from the project boundary. The survey shall occur no longer than 14 days prior to the start of construction work (including clearing, grubbing or grading). If no active nests are found during the survey, no further mitigation will be required. If an active nest(s) is found the California Department of Fish and Game shall be contacted to determine appropriate avoidance/protective measures.

MITIGATION MEASURE D: WETLANDS AND VERNAL POOLS

Before the approval of grading and improvement plans and before any groundbreaking activity requiring the fill of wetlands or other waters of the United States or waters of the state the project proponent shall obtain all necessary permits under Sections 401 and 404 of the CWA or the States Porter-Cologne Act. Replace, restore, or enhance on a "no net loss" basis (in accordance with USACE, the Central Valley RWQCB, and the Natural Resources Element of the City General Plan) the acreage of all wetlands and other waters of the United States subject to USACE jurisdiction and waters of the state subject to RWQCB jurisdiction and the City General Plan that would be removed, lost, and/or degraded with implementation of the project. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE, the Central Valley RWQCB, and the City, as appropriate depending on agency

jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

MITIGATION MEASURE E: NATIVE OAK TREE REMOVAL

The removal of 573 inches dbh of native oak trees shall be compensated by planting native oak trees (either valley oak/*Quercus lobata*, blue oak/*Quercus douglasii* or interior live oak/*Quercus wislizenii*) equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the City of Rancho Cordova.

Equivalent compensation based on the following ratio is required:

- one D-pot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Prior to the start of construction a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the City for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings;
2. Method of irrigation;
3. The Sacramento County Standard Tree Planting Detail L-1 (or equivalent), including the 10-foot deep boring hole to provide for adequate drainage;
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.

No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.

The project applicant shall submit a mitigation plan that provides for complete mitigation of the removal of oak trees in coordination with the City of Rancho Cordova. The mitigation plan shall be subject to the approval of the City.

MITIGATION MEASURE F: OAK TREE CONSTRUCTION PROTECTION

All native oak trees that are 6 inches dbh or larger on the project site, off-site but overhanging onto the project site, and those which may be impacted by utility installation and/or improvements associated with this project, which are not removed and compensated for through Mitigation Measure E above, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.

2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the oak trees prior to initiating project construction, in order to avoid damage to the trees and their root system.

3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support), or any other items shall be attached to the oak trees.

4. No vehicles, construction equipment, mobile home/office, supplies, materials, or facilities shall be driven, parked, stockpiled, or located within the driplines of the oak trees.

5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the oak trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications, and irrigation management guidelines.

6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of oak trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.

7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.

8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of the oak trees.

9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.

10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".

11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.

MITIGATION MEASURE G: HAZARDOUS MATERIALS

To minimize impacts associated with Aerojet General Corporation remedial equipment and potential dump sites, the project proponent shall:

1. Destroy and reconstruct any impacted monitoring, extraction and recharge wells to the satisfaction of the California Department of Toxic Substances Control and the California Regional Water Quality Control Board.

2. Develop a contingency plan in the event that construction activities uncover unforeseen dump sites or contamination that may hinder the progress of the project. The plan should include steps to contain any contamination, consultation with regulatory agencies and a work plan to evaluate and characterize any contamination.

MITIGATION MEASURE H: CULTURAL RESOURCES – UNANTICIPATED DISCOVERIES

If subsurface deposits believed to be cultural or human in origin are discovered during construction, then all work must halt within a 200-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained at the

Applicant's expense to evaluate the significance of the find. If it is determined due to the types of deposits discovered that a Native American monitor is required, the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites as established by the Native American Heritage Commission shall be followed, and the monitor shall be retained at the Applicant's expense.

Work cannot continue within the 200-foot radius of the discovery site until the archaeologist conducts sufficient research and data collection to make a determination that the resource is either 1) not cultural in origin; or 2) not potentially eligible for listing on the National Register of Historic Places or California Register of Historical Resources.

If a potentially-eligible resource is encountered, then the archaeologist, DERA, and project proponent shall arrange for either 1) total avoidance of the resource, if possible; or 2) test excavations or total data recovery as mitigation. The determination shall be formally documented in writing and submitted to DERA as verification that the provisions of CEQA for managing unanticipated discoveries have been met.

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 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 COMPLIANCE

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

INITIAL STUDY PREPARERS

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INITIAL STUDY CHECKLIST

FOR WHITE ROCK ROAD IMPROVEMENTS

CONTROL NUMBER: 2009-70081

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. The words "significant" and "significance" used throughout the following checklist are related to impacts as defined by the California Environmental Quality Act.

INITIAL STUDY CHECKLIST

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	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 City of Rancho Cordova General Plan and the Sacramento County General Plan.
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 project does not propose new unplanned homes, businesses or extension of infrastructure.
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.
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 is not adjacent to lands considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance nor are there prime soils adjacent to the new alignment.
b. Conflict with any existing Williamson Act contract?			X	No Williamson Act contracts apply to properties adjacent to the roadway.
c. Introduce incompatible uses in the vicinity of existing agricultural uses?			X	The project does not occur in an area of agricultural production.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
4. **AESTHETICS -** Would the project:				
a. Substantially alter existing viewsheds such as scenic highways, corridors or vistas?			X	Viewers are generally limited to persons driving on the road. White Rock Road is an existing arterial roadway and this project will only add travel lanes. The viewshed will not be noticeably altered.
b. Substantially degrade the existing visual character or quality of the site and its surroundings?			X	Viewers are generally limited to persons driving on the road. White Rock Road is an existing arterial roadway and this project will only add travel lanes. The viewshed will not be noticeably altered.
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 would not result in substantial new sources of light, glare or shadow.
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	A portion of White Rock Road is within the Mather CLUP CNEL 60 noise exposure area. However, White Rock Road is an existing arterial roadway and this project will only add travel lanes. The project will not expose people residing or working in the project area to aircraft noise levels in excess of applicable standards.
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 improvements to White Rock Road will improve safety on this roadway and will not result in a change in air traffic patterns.
6. **PUBLIC SERVICES -** Would the project:				
a. Have an adequate water supply for full buildout of the project?			X	Upon completion of construction, the project will not create additional demand for water supply.
b. Have adequate wastewater treatment and disposal facilities for full buildout of the project?			X	Upon completion of construction, the project will not require wastewater treatment or disposal facilities.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
c. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	The Sacramento County Integrated Waste Management Plan provides for adequate waste disposal capacity to serve existing and anticipated development until the year 2010. The Keifer Landfill has capacity to accommodate solid waste until the year 2030. In addition, the completed project will not have solid waste disposal needs.
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	The project would not require construction or expansion of new water supply, wastewater treatment, or wastewater disposal facilities.
e. Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?			X	The project will result in the relocation of storm water drainage facilities adjacent to the roadway to accommodate the ultimate 6 lane roadway configuration. Impacts associated with this relocation will be discussed in the "Drainage" section of the Initial Study. No substantial adverse physical impacts are anticipated.
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?			X	Project construction would 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 not affect the provision of emergency services. No substantial adverse physical impacts associated with emergency services are anticipated.
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.
i. Result in substantial adverse physical impacts associated with the provision of park and recreation services?			X	The project will not affect the provision of park services.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
7. **TRANSPORTATION/TRAFFIC** - Would the project:				
a. Result in a substantial increase in peak hour vehicle trip-ends that could exceed, either individually or cumulatively, a level of service standard established by the City?			X	The project will not cause existing roadways or intersections to operate at unacceptable levels or degrade existing unacceptable conditions. The proposed project would improve traffic flow between the industrial portion of White Rock Road on the west by eliminating a bottle neck at that location and prevent a future bottle neck at the eastern portion of the project site where the project connects to the County widening project. This is further discussed in the "Traffic" section of the Initial Study.
b. Result in a substantial adverse impact to access and/or circulation?			X	The project will be required to comply with applicable access and circulation requirements of the City of Rancho Cordova Improvement Standards and the Uniform Fire Code. Upon compliance, impacts are considered less than significant.
c. Result in substantial adverse impact due to inadequate parking capacity?			X	No parking is required.
d. Result in a substantial adverse impact to public safety on area roadways?			X	The project will improve circulation on White Rock Road. Access and roadway improvements associated with the project will not adversely affect public safety on area roadways.
e. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X	No conflicts with adopted policies, plans, or programs supporting alternative transportation have been identified.
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	Vehicular emissions are the primary source of pollutants in the Sacramento area. Although the project will contribute to increased vehicular emissions it will not exceed applicable air quality thresholds established by the Sacramento Metropolitan Air Quality Maintenance District.
b. Expose sensitive receptors to pollutant concentrations in excess of standards?			X	The project will not expose sensitive receptors (i.e., schools, nursing homes, hospitals, daycare centers, etc.) to pollutant concentrations in excess of standards.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
c. Create objectionable odors affecting a substantial number of people?			X	Objectionable odors are not expected from the completed project. While construction activities such as paving may create odors, there are currently very few receptors in the project vicinity; the majority of the project alignment is adjacent to currently undeveloped land.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
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 will not result in exposure of persons to, or generation of, noise levels in excess of applicable standards.
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 considered 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 City of Rancho Cordova's Noise Ordinance (Chapter 6.68 of the Municipal 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 existing drainage adjacent to the roadway will be relocated to accommodate the ultimate 6 lane roadway configuration; however, the project will not result in flooding on- or off-site due to this change or by increasing the rate or amount of surface runoff. Compliance with applicable requirements of the City of Rancho Cordova General Plan and Land Development Ordinance will ensure 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 or within a local flood hazard area.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?			X	Improvements associated with the project will not impede or redirect flows within a 100-year floodplain.
e. 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.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
f. Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems?			X	Adequate on- and/or off-site drainage improvements will be required pursuant to the City of Rancho Cordova General Plan and Land Development Ordinance.
g. Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality?			X	The project will not create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality.
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 assure less than significant impacts.
b. Result in substantial soil erosion, siltation or loss of topsoil?			X	Compliance with the City of Rancho Cordova's Land Grading and Erosion Control Ordinance (Chapter 16.44 of the Municipal Code) 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.
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.
d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available?			X	The project would not require septic tanks or wastewater disposal systems.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
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.
f. Directly or indirectly destroy a unique paleontological resource or site?			X	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?		X		Several special status plants and animals have the potential to occur on or utilize the project site. These species are discussed in the "Biological Resources" section of the Initial Study.
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community?		X		Vernal pools exist within the project vicinity. Impacts to vernal pools are discussed in the "Biological Resources" section of the Initial Study.
c. Have a substantial adverse effect on wetlands designated as jurisdictional waters of the United States as defined by Section 404 of the Clean Water Act?		X		Jurisdictional wetlands have been identified within the project vicinity. Construction could result in impacts to adjacent non-jurisdictional wetlands, including vernal pools, seasonal wetland swales, and seasonal wetlands. These impacts are discussed in the "Biological Resources" section of the Initial Study.
d. Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species?			X	Resident and/or migratory wildlife may be displaced by project construction. However, no major wildlife corridors would be affected.
e. 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	The project site contains trees and other vegetation that may provide habitat for local and migratory animal species. Though the project may result in impacts to these species, it will not substantially reduce their habitat or affect long-term population levels, nor would the project eliminate any plant or animal community.
f. Adversely affect or result in the removal of native or landmark trees?		X		Native and/or landmark trees occur adjacent to White Rock Road and may be affected by construction. Compensation will be required for removal of any native or landmark tree. Impacts are discussed in the Biological Resources section of the Initial Study.
g. Conflict with any local policies or ordinances protecting biological resources?			X	The project is consistent with local policies/ordinances protecting biological resources.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
h. 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 an historical resource?		X		There are known historical resources within the project limits. Impacts are discussed in the Cultural Resources section of the Initial Study.
b. Have a substantial adverse effect on an archaeological resource?		X		The Northern California Information Center was contacted regarding the proposed project. A record search indicated that the project site is not considered sensitive for archaeological resources. The adjacent property to the south of the project alignment was surveyed as part of a development project known as Rio Del Oro. Refer to the "Cultural Resources" section of the Initial Study.
c. Disturb any human remains, including those interred outside of formal cemeteries?		X		No known human remains exist on the project site. Nonetheless, mitigation requiring appropriate treatment of any uncovered remains will ensure that impacts are less than significant.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
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 is located in an area with known hazardous substances which may be affected during project construction. Impacts related to hazardous materials will be discussed in the Hazardous Materials section of the Initial Study.
b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?		X		See 14.a.
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		See 14.a.
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.

SUPPLEMENTAL INFORMATION

LAND USE CONSISTENCY	Current Land Use Designation	Consistent	Not Consistent	Comments
General Plan	Various	X		The project does not propose any land use or zoning designation changes.
Community Plan	Various	X		The project does not propose any land use or zoning designation changes.
Land Use Zone	Various	X		The project does not propose any land use or zoning designation changes.

[i] **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.

[ii] **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.

[iii] **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.