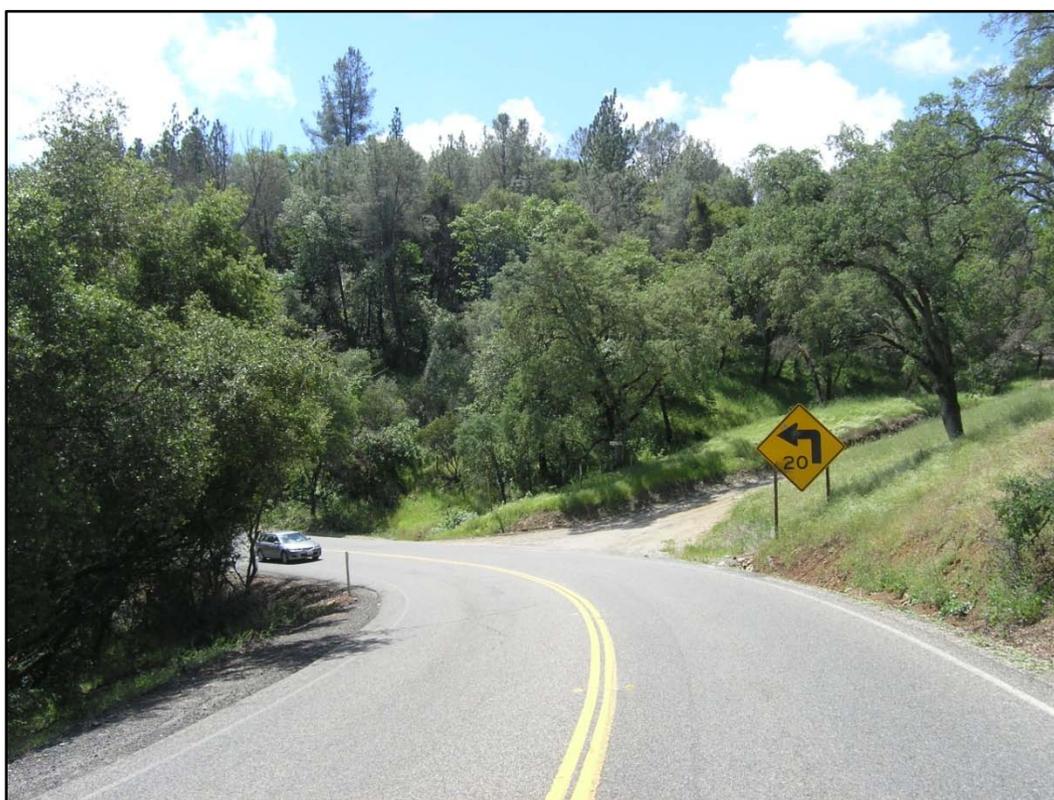


State Route 49 Curve Improvement

EL DORADO COUNTY, CALIFORNIA
DISTRICT 3 – ED – 49, PM 3.76/3.92
EA 03-4E590, EFIS 0300000711

Initial Study with Mitigated Negative Declaration



Prepared by the
State of California Department of Transportation



November 2011

GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Final Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in El Dorado County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). A Categorical Exclusion (CE) has been prepared pursuant to NEPA. This document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What happened before this:

The Draft IS was circulated for public review from June 10, 2011 to July 11, 2011. A public open house was held at the Diamond Springs/El Dorado Fire Protection District on June 23, 2011. Comments made during public review and the open house and responses to comments can be found in Chapter 3.

Changes to text between the Draft IS and the Final IS are denoted with a black vertical line in the left hand margin. Note, the black line is not shown in the following areas of the document: 1) where very minor typographical changes were made, 2) formatting changes, and 3) Chapter 3 where the comments and responses are placed.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Jennifer S. Clark, Environmental Planning, 2379 Gateway Oaks Drive, Suite 150, Sacramento, CA 95833; (916) 274-0601 Voice, or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2229 (Voice) or 711.

03-ED-49-PM 3.76/3.92
EA 03-4E590
EFIS 0300000711

Curve improvement on State Route 49 in El Dorado County

**INITIAL STUDY with
Proposed Mitigated Negative Declaration**

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

6/8/2011
Date of Approval

For Susan D. Bauer
John Webb, Office Chief
North Region Environmental Services

MITIGATED NEGATIVE DECLARATION
Pursuant to: Division 13, Public Resources Code

Project Description

The Department of Transportation (Caltrans) proposes to modify a curve along State Route (SR) 49 in El Dorado County from Post Mile (PM) 3.76 to PM 3.92. The project is located approximately 6 miles south of the town of El Dorado and approximately 11 miles southwest of the City of Placerville. The project would include widening existing lanes to 12 ft, widening the shoulders to 4 ft, and removing trees for sight distance.

Determination

Caltrans has prepared an Initial Study for this project, and following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on coastal zones, wild and scenic rivers, parks and recreation facilities, growth, timberlands, community character and cohesion, utilities, bicycle facilities, pedestrian facilities, cultural resources, floodplains, water quality, and threatened and endangered species.

In addition, the proposed project would have no significant effect on existing and future land use, farmlands, traffic and transportation, geology/soils, hazardous materials, air quality, noise, oak woodlands, waters of the U.S., other waters, and animal species.

The proposed project would have no significantly adverse effect on visual resources because shrubs and tree seedlings would be replanted within Caltrans right of way where feasible. These mitigation measures would reduce the potential effects to insignificance.

for Juan D. Bauer
John Webb, Office Chief
North Region Environmental Services
California Department of Transportation

11-18-2011
Date

TABLE OF CONTENTS

CHAPTER 1	PROPOSED PROJECT	1
1.1	Introduction.....	1
1.2	Project Description.....	1
1.3	Project Funding.....	1
1.4	Purpose and Need.....	1
1.5	Alternatives.....	3
1.5.1	Alternative 1: Eliminate Compound Curve and Widen Roadway	3
1.5.2	No-Build Alternative	4
1.6	Permits and Approvals Needed.....	4
CHAPTER 2	AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION AND MITIGATION MEASURES.....	9
2.1	Human Environment	9
2.1.1	Land Use	9
2.1.2	Farmlands.....	10
2.1.3	Traffic and Transportation.....	10
2.1.4	Visual/Aesthetics	11
2.1.5	Cultural Resources	12
2.2	Physical Environment	15
2.2.1	Water Quality and Storm Water Runoff.....	15
2.2.2	Geology/Soils/Seismic/Topography	19
2.2.3	Hazardous Waste/Materials	19
2.2.4	Air Quality	20
2.2.5	Noise	23
2.3	Biological Environment	24
2.3.1	Natural Communities	24
2.3.2	Wetlands and Other Waters.....	25
2.3.3	Animal Species	28
2.3.4	Threatened and Endangered Species.....	28
2.4	Climate Change	30
CHAPTER 3	COMMENTS AND COORDINATION.....	37
CHAPTER 4	LIST OF PREPARERS AND TECHNICAL STUDIES	47
CHAPTER 5	DISTRIBUTION LIST.....	48
APPENDIX A	CEQA CHECKLIST	49
APPENDIX B	SENSITIVE SPECIES LIST.....	58
APPENDIX C	TITLE VI POLICY STATEMENT.....	63
APPENDIX D	AVOIDANCE, MINIMIZATION AND MITIGATION SUMMARY	64

LIST OF TABLES

TABLE 1:	COLLISION DATA FROM 4/1/2004-3/31/2009.....	1
TABLE 2:	FARMLAND IMPACTS.....	10
TABLE 3:	IMPACTS TO WATERS OF THE U.S.....	27
TABLE 4:	CLIMATE CHANGE/CO2 REDUCTION STRATEGIES.....	36

LIST OF FIGURES

FIGURE 1:	SOUTHBOUND PHOTO 2	2
FIGURE 2:	SOUTHBOUND PHOTO 2	3
FIGURE 3:	PROJECT VICINITY MAP.....	5
FIGURE 4:	PROJECT LOCATION MAP.....	6
FIGURE 5:	PROJECT LAYOUT MAP.....	7
FIGURE 6:	CALIFORNIA GREENHOUSE GAS FORECAST	33
FIGURE 7:	THE MOBILITY PYRAMID	35

CHAPTER 1 PROPOSED PROJECT

1.1 INTRODUCTION

The Department of Transportation (Caltrans) proposes to modify a curve along State Route (SR) 49 in El Dorado County from Post Mile (PM) 3.76 to PM 3.92. The project is located approximately 6 miles south of the town of El Dorado and approximately 11 miles southwest of the City of Placerville. See Figures 3 and 4 for project vicinity and location maps.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). This Initial Study (IS) with Mitigated Negative Declaration (MND) has been prepared in compliance with CEQA. A Categorical Exclusion has been prepared pursuant to NEPA.

1.2 PROJECT DESCRIPTION

Within the project limits, SR 49 is a two lane rural road, with 10.5 ft wide lanes and shoulders that vary in width from 1 ft to 4 ft. At the project location, the roadway makes a sharp curve to the east. Ramales Lane (formally Mica Street) is a private unpaved road that forms a “T” intersection along the outside of the curve. A large grove of trees lies within the inside of the curve, obscuring sight distance for both directions of travel. This project proposes to modify the existing curve, widen the lanes and shoulders, and remove trees for improved sight distance.

1.3 PROJECT FUNDING

This project is programmed under the State Highway Operation and Protection Program (SHOPP) 201.010 Safety Improvement Program. The project is estimated to cost \$1,798,000 and is included in the Sacramento Area Council of Governments (SACOG) 2011/14 Metropolitan Transportation Improvement Program (MTIP).

1.4 PURPOSE AND NEED

There have been a number of run-off road collisions in this area, mostly by southbound traffic, with the majority of these collisions involving injuries. A 20 mph curve warning sign is present on both the northern and southern approaches to the curve. In response to the high collision rate at this location, the southbound curve warning sign was enlarged from 30 inches to 72 inches in February 2003. Despite this improvement, the collision rate is higher than the statewide average for a similar facility. The collision history at the project location for the five-year period from April 1, 2004 to March 31, 2009 is summarized in the table below.

TABLE 1: COLLISION DATA FROM 4/1/2004-3/31/2009

Actual Collisions (PM 3.76/3.92)			Actual Rates Per Million Vehicle Miles			Average Statewide Rates Per Million Vehicle Miles**		
Fatal	Fatal + Injury	Total*	Fatal	Fatal + Injury	Total*	Fatal	Fatal + Injury	Total*
0	9	12	0.00	2.48	3.31	0.032	0.62	1.34

*All reported collisions including those without fatalities or injuries.

Four (25%) of the twelve collisions involved wet roads, and eleven involved a single vehicle traveling south.

The typical pattern for a collision is a single vehicle leaving the roadway and colliding with the steep cut bank on the outside of the curve. These collisions occur after vehicles have entered the sharper curve, indicating that vehicles are entering the curve too fast.

Evidence of the run-off road collisions is present in a large dirt area on the cut slope that is covered in wheel tracks where errant vehicles have scoured away existing vegetation (see photo below). The presence of multiple tire tracks indicate that the collision rate for this location may be higher than recorded due to lightly damaged/undamaged vehicles driving off after a collision and not filing a report.



FIGURE 1: SOUTHBOUND PHOTO 2

View looking south from Ramales Lane showing southern cut bank and evidence of run-off road collisions along cut slope

A contributing collision factor is the lack of sight distance through the curve. Vehicles entering the curve cannot see the far side of the curve, and it is not immediately evident that the curve is a compound curve (see photo below). A compound curve has more than one radius meaning that the curve's "tightness" changes part way through the curve. The curve proposed for modification has two radiuses (225 ft and 140 ft).

For southbound traffic, the initial curve radius (225 ft) is suitable for a greater speed than the posted 20 mph, but the second curve radius (140 ft) is not. Because the far side of the curve is obscured, the initial impression to southbound drivers is that a vehicle can enter the curve at a greater speed than posted, resulting in vehicles losing control after entering the second, sharper curve.



FIGURE 2: SOUTHBOUND PHOTO 2

Driver's view looking southbound. The degree of curvature and southern cut slope is hidden by the trees lining the inside of the curve. Ramales Lane is visible just beyond the curve warning sign.

The narrow lanes, shoulders, and small curve radius also cause off-tracking problems for trucks. Off-tracking is when a vehicle makes a turn and its rear wheels do not follow the same path as its front wheels. Deep ruts in the dirt are created by the trailers of northbound trucks off-tracking off the paved shoulder. Southbound trucks also drift off the shoulder to keep their trailers from off-tracking across the centerline.

This project proposes to improve safety at this location by providing a single radius curve. In addition, more recovery room for vehicles will be provided with the wider shoulders. The visibility of the curve will also be improved by removing trees on the inside of the curve.

1.5 ALTERNATIVES

1.5.1 Alternative 1: Eliminate Compound Curve and Widen Roadway

This alternative would:

- Replace the existing compound curve with a single radius curve
- Widen the lanes to 12 ft
- Widen shoulders to 4 ft
- Remove trees along the inside of the curve to improve sight distance
- Extend a 90" diameter culvert
- Replace a 12" culvert with an 18" culvert

Due to geotechnical considerations, the lanes and western shoulder will not be widened north of Ramales Lane to avoid disturbing a potentially unstable cut slope. Because the shoulder width is narrow, the roadside ditch will be paved to assist in stabilizing the roadway structural section.

Several cuts and fills will be required, necessitating the acquisition of both permanent and temporary right of way. See Figure 5 for a project layout map.

This alternative would reduce the potential for future run-off road collisions at this location, and is therefore the Preferred Alternative.

1.5.2 No-Build Alternative

This alternative would leave the roadway in its current state and would have no impacts to environmental resources. However, this alternative would not improve the safety of the roadway at this location and would not meet the purpose and need of the project.

1.6 PERMITS AND APPROVALS NEEDED

The following permits would be required prior to construction. Applications would be submitted after final environmental approval.

- US Army Corps of Engineers (USACE) Section 404 Non-Reporting Nationwide permit for filling or dredging waters of the United States
- California Department of Fish and Game (CDFG) 1602 Agreement for Streambed Alteration
- Central Valley Regional Water Quality Control Board (CVRWQCB) Section 401 Water Quality Certification

FIGURE 3: PROJECT VICINITY MAP

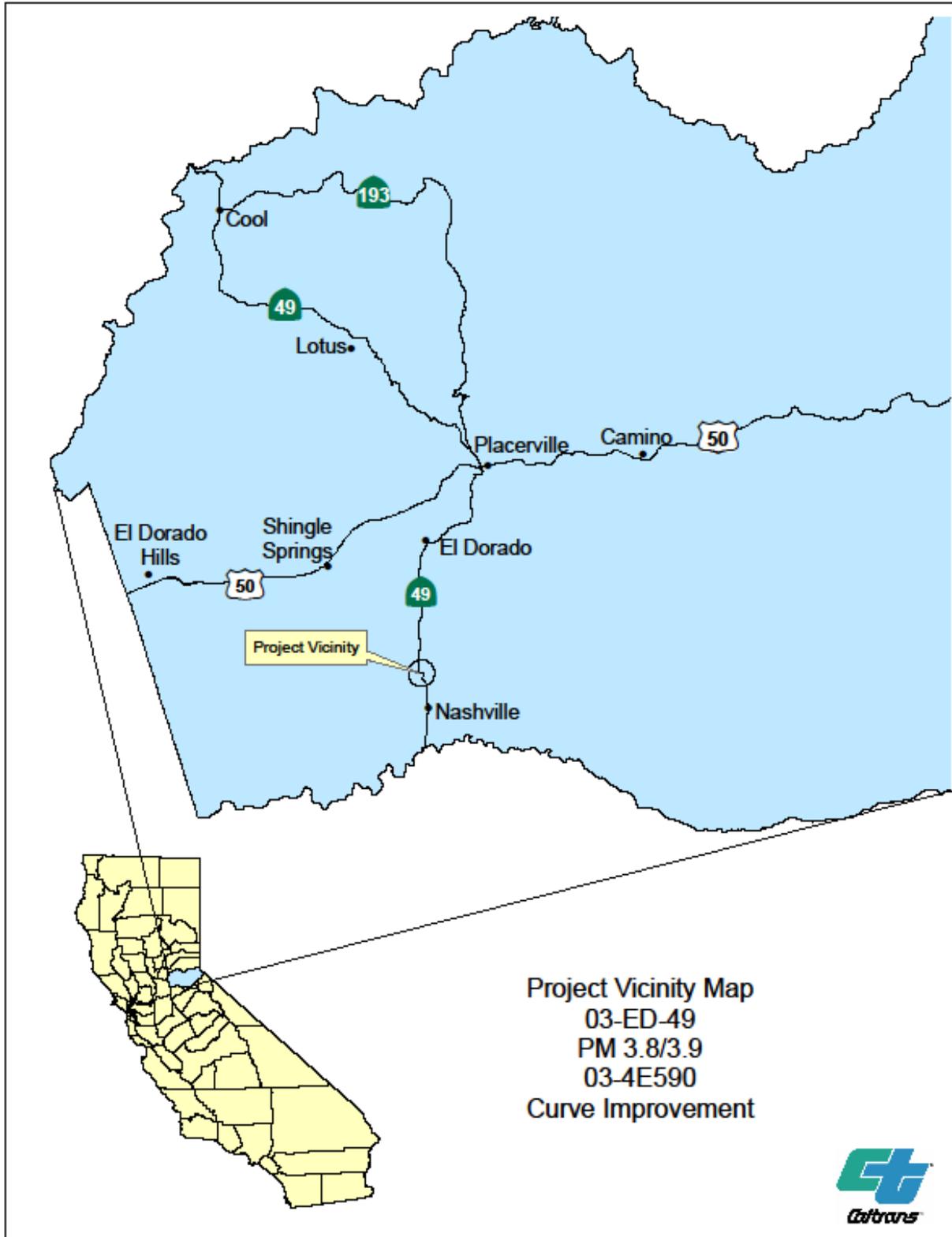
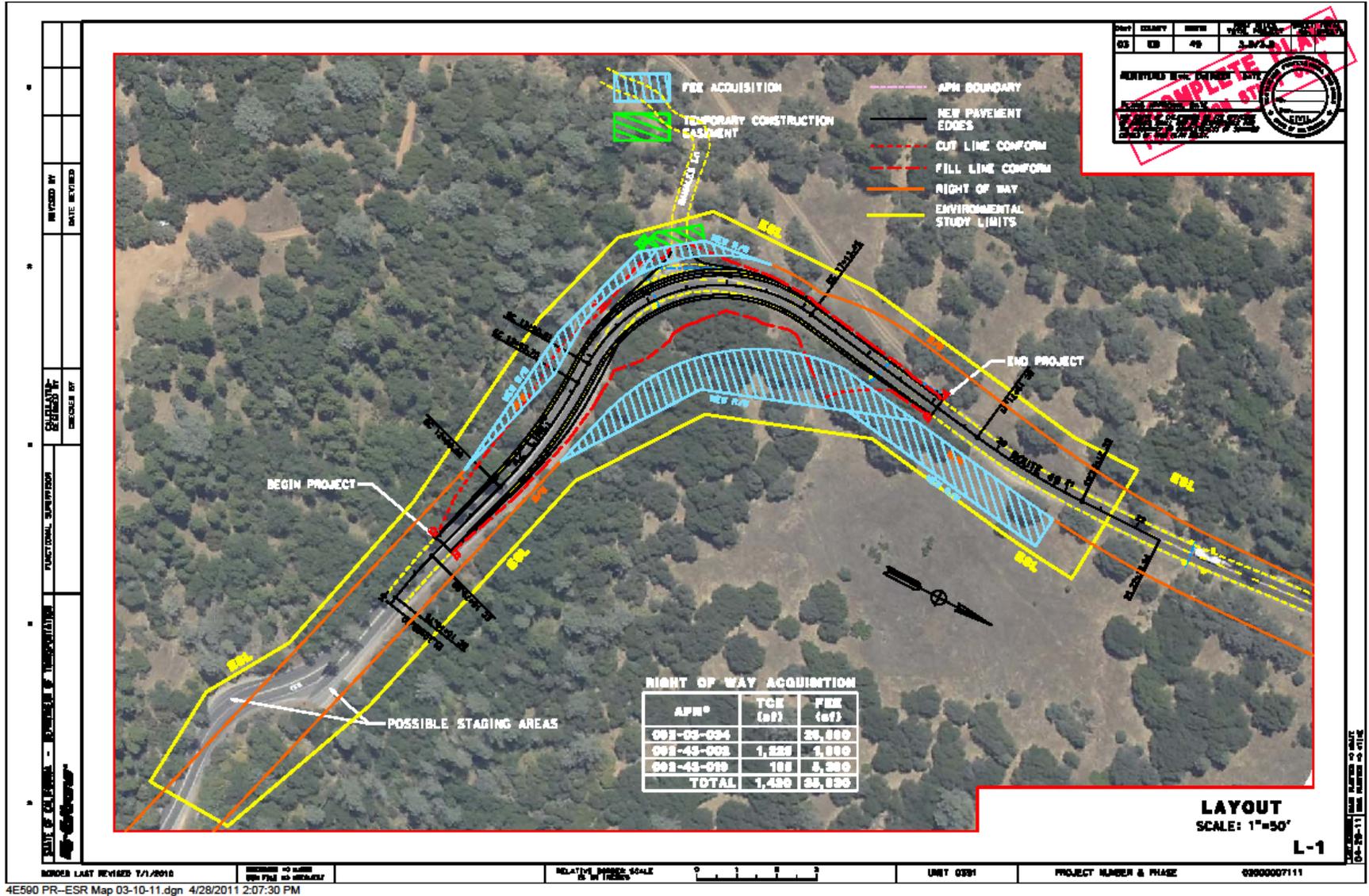


FIGURE 5: PROJECT LAYOUT MAP



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CHAPTER 2 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION AND MITIGATION MEASURES

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified: coastal zones, wild and scenic rivers, parks and recreation facilities, growth, timberlands, community character and cohesion, utilities, bicycle facilities, pedestrian facilities, and floodplains. Consequently, there is no further discussion regarding these issues in this document.

2.1 HUMAN ENVIRONMENT

2.1.1 Land Use

Existing and Future Land Use

Affected Environment

The proposed project is in a rural area of El Dorado County. The land adjacent to the highway has a land use designation of Rural Residential. The project would require new right of way from the parcels adjacent to the highway. There are three parcels that would be affected. The parcels are zoned as Residential Agriculture-20 (RA-20), which has a minimum lot size of 20 acres and Estate Residential Districts (RE-10), which has a minimum lot size of 10 acres.

Environmental Consequences

Portions of the parcels adjacent to the highway will need to be acquired to construct this project. The acquisition of this land is not expected to substantially affect existing or future land use. Less than significant impacts to land use pursuant to the California Environmental Quality Act (CEQA) are anticipated and no avoidance, minimization or mitigation measures are required.

Consistency with State, Regional, and Local Plans and Programs

Affected Environment

The El Dorado County General Plan was adopted on July 19, 2004. Goal TC-1 of the Transportation and Circulation is "To plan for and provide a unified, coordinated, and cost-efficient countywide road and highway system that ensures the safe, orderly, and efficient movement of people and goods."

Environmental Consequences

The purpose of this project is to improve safety along this section of SR 49 therefore this project would be consistent Goal TC-1 of the El Dorado County General Plan.

2.1.2 Farmlands

Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 USC 4201-4209; and its regulations, 7 CFR Part 658) require federal agencies, such as FHWA, to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses.

Affected Environment

This project would require acquisition of land adjacent to the highway. There are three parcels that would be affected. The land affected is Grazing Land according to the “El Dorado Important Farmland 2006” map provided by the California Department of Conservation. Grazing Land is defined as “land on which the existing vegetation is suited to the grazing of livestock.” There are no prime, unique, or statewide important farmlands within the project limits. None of the affected parcels are under a Williamson Act contract.

Environmental Consequences

The following table lists the parcels and the approximate amount of land that would be required from each.

TABLE 2: FARMLAND IMPACTS

APN	Total size of parcel (acres)	Amount needed (acres)	Percentage of total parcel needed
092-030-34	203.74	0.66	0.32 %
092-430-02	40.28	0.04	0.09 %
092-430-19	20.96	0.12	0.57 %

Considering the large size of the parcels affected and the small percentage of land that would be needed to construct this project, the impacts to farmland are considered less than significant. No avoidance and minimization or mitigation measures are proposed.

2.1.3 Traffic and Transportation

Affected Environment

Within the project limits, the average annual daily traffic is 4,180 vehicles. This segment of highway has a higher than average collision rate as shown in section 1.4 of this document.

Environmental Consequences

The purpose of this project is to improve the safety of the highway within the project limits. This project will not add capacity to the highway and no permanent impacts to traffic and transportation are anticipated. Temporary impacts to traffic will occur during construction. It is expected that one-way traffic control will be used during construction. The proposed project is expected to have less than significant impacts to traffic and transportation.

Avoidance and Minimization Measures

A Traffic Management Plan (TMP) will be prepared for this project to minimize impacts to traffic during construction.

2.1.4 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 USC 4331[b][2]). To further emphasize this point, the Federal Highway administration in its implementation of NEPA (23 USC 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities.” (CA Public Resources Code Section 21001[b])

Affected Environment

The visual environment is of a pleasant rural setting. This portion of SR 49 winds in tight curves and is surrounded by steep cut slopes on one side and canyons on the other. Immediate views are of the oak studded roadway. Distant views are of the vegetated canyons beyond the roadway. The resident’s views are mostly of the canyons, while the drivers see the roadway as well as the canyons. The predominant native vegetation of this area is oak woodland including pine species. Native grasses and poison oak are abundant as ground covers. This portion of SR 49 is not a State Designated Scenic Highway; however it is eligible for designation. As such, care must be taken to preserve its natural resources and visual attributes.

Environmental Consequences

The project proposes to remove approximately 73 large trees as well as a number of smaller trees for a total of 110. Most of these trees are very large oaks with multiple trunks on the east side of the roadway (inside of the curve). These trees are being removed to provide better sight distance for the curve. Trees would also be removed on the west side of the roadway to provide room for widening. This slope is steep though and has been previously disturbed by roadway cuts. The removal of large oaks for the proposed project would result in a moderate visual impact for this rural area. However, the slope will be revegetated with shrubs and oak trees will be planted within Caltrans’ right of way where feasible. Impacts to visual resources are considered less than significant with mitigation.

Environmental Consequences-Cumulative

This project is three miles from the Logtown (EA 03-4C090) project. The Logtown project also required tree removal. Mitigation for visual resources was required for the Logtown project and revegetation efforts are currently underway. With mitigation, the proposed project is expected to have a less than cumulatively considerable impact to visual resources.

Avoidance and Minimization Measures

The following measures will be incorporated into the project:

- Provide erosion control seeding to all new slopes as well as other disturbed areas.
- Root balls from existing trees shall be completely removed.
- Fill material shall be specified, compacted and prepped for replanting with assistance of project landscape architect or project revegetation specialist.
- Provide soil amendments in all fill slopes, in order to support overall plant survival.
- The project team will coordinate with Caltrans Office of Landscape Architecture for all planting plan preparation.

Mitigation Measures

The following items will provide mitigation for the visual impacts of the project:

- Plant oak and other native tree seedlings within the right of way where feasible, and where mature trees will not block sight distances. Final replacement ratios will be determined by the revegetation specialist and the project landscape architect during final design.
- Install native shrub planting where oak trees are slated for removal to enhance the visual quality of the new fill slope and to provide added erosion control for the slopes. Shrub height not to exceed 6 feet at maturity, and mature trunks not to exceed 4" in diameter. Shrubs are recommended so as to avoid placing obstacles in the clear recovery zone or the blocking the site distance.

2.1.5 Cultural Resources

Regulatory Setting

“Cultural resources” as used in this document refers to all “built environment” resources (structures, bridges, railroads, water conveyance systems, etc.), culturally important resources, and archaeological resources (both prehistoric and historic), regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 327) (July 1, 2007).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way.

Affected Environment

The following research was conducted to determine if any known cultural resources were present in the project's environmental study limit.

- Record and literature search conducted at the North Central Information Center on 02/26/09.
- Coordination and consultation with the California Native American Heritage Commission on 02/27/09.
- Consultation with the El Dorado County Historical Society on 03/27/09.

No known archaeological sites occur within the project limits, however, the research revealed that the project limits are located within the Nashville Mining District, an historic-era mining area that was mined actively during the California Gold Rush period (the Mother Lode Gold belt) through the 1930's Great Depression era. The Nashville Mining District is not a "Historic District" under the National Register of Historic Places or the California Register of Historical Resources. The Nashville and Montezuma mines are included in this district, but not in the current project area.

A pedestrian archaeological survey was conducted on March 16, 2009 and again on August 5, 2009. The environmental study limits were examined closely for historic-era mining sites and features associated with the previously identified mining district. Due to the presence of the mining district, the general area of the project is of moderate to high sensitivity for historic mining sites and features. The entire area is located on a steep slope and the lane widening aspect of the project will occur within highway cut/fill. The survey revealed a rock/cobble construction retaining wall associated with the 90" culvert, the wall was determined to be exempt from further evaluation pursuant to the Caltrans Section 106 PA. There are no historic-era built environment features within the project area and no significant cultural resources were noted within the project limits.

Environmental Consequences

Based on a review of background information and field surveys, it was determined that the proposed project would not affect cultural resources. In the remote event that cultural resources are discovered during construction, the below avoidance and minimization measures will be implemented.

Avoidance and Minimization Measures

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission who will then notify the Most Likely

Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District 3 Environmental Management so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 PHYSICAL ENVIRONMENT

2.2.1 Water Quality and Storm Water Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S. to obtain certification from the State that the discharge will comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request. See below.)
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

USACE issues two types of 404 permits: Standard and General permits. There are two types of General permits, Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to authorize a variety of minor project activities with no more than minimal effects.

There are two types of Standard permits: Individual permits and Letters of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE’s Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA’s Section 404 (b)(1) Guidelines (U.S. EPA CFR 40 Part 230), and whether permit approval is in the public interest. The Section 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA), to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse

environmental consequences. Per Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause “significant degradation” to waters of the U.S. In addition every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California’s Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This Act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the State. Waters of the State include more than just Waters of the U.S., like groundwater and surface waters not considered Waters of the U.S. Additionally, it prohibits discharges of “waste” as defined and this definition is broader than the CWA definition of “pollutant”. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA, and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. States designate beneficial uses for all water body segments, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, each state identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source controls, the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, water pollution control, and water quality functions throughout the state. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollution Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water dischargers, including Municipal Separate Storm Sewer Systems (MS4s). The U.S. EPA defines an MS4 as any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying storm water. The SWRCB has

identified Caltrans as an owner/operator of an MS4 by the SWRCB. This permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Caltrans' MS4 Permit, under revision at the time of this update, contains three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. Caltrans' storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs) and other measures.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices (BMPs). The proposed Project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Part of and appended to the SWMP is the Storm Water Data Report (SWDR) and its associated checklists. The SWDR documents the relevant storm water design decisions made regarding project compliance with the MS4 NPDES permit. The preliminary information in the SWDR prepared during the Project Initiation Document (PID) phase will be reviewed, updated, confirmed, and if required, revised in the SWDR prepared for the later phases of the project. The information contained in the SWDR may be used to make more informed decisions regarding the selection of BMPs and/or recommended avoidance, minimization, or mitigation measures to address water quality impacts.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites which result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention

plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). In accordance with the Caltrans' Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water body must obtain a 401 Certification, which certifies that the project will be in compliance with State water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before USACE issues a 404 permit.

In some cases the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Affected Environment

This project lies in the North Fork Cosumnes Hydrologic Sub-Area (HSA) 532.23. The North Fork of the Cosumnes flows parallel to SR 49 within the project area. There are no 303 (d) listed (impaired) water bodies in the vicinity of this project. The project is within the EI Dorado County MS-4 boundary and is within the jurisdiction of the Central Valley RWQCB.

Environmental Consequences

This project will have a disturbed soil area of less than 1 acre and is expected to take one construction season. No water quality impacts are anticipated. The existing Statewide Permit, Order No. 99-06-DWQ, is expected to be superseded by the draft Tentative Order No. 2011-XXX-DWQ, which is undergoing a public commenting period. The new Statewide permit, when adopted, may result in additional requirements..

Avoidance and Minimization Measures

- A Water Pollution Control Program (WPCP) will be prepared by the contractor. Appropriate construction site BMPs shall be implemented to avoid and minimize water quality impacts.
- No asphalt concrete (AC) grinding may be placed in shoulder backing at locations where erosion or maintenance operations could result in their deposit into waterways.

2.2.2 Geology/Soils/Seismic/Topography

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

Environmental Consequences

A Preliminary Geotechnical Report evaluated the existing cut and fill slopes and provided new slope recommendations. Analysis of the existing soil conditions indicate that the southern cut slope is stable and may be cut back to the same or steeper angle. A hillside to the north consists of highly fractured rock and is less stable; however, no excavation is proposed for this location. The lanes and shoulder at this location will not be widened to avoid disturbing this slope. Fill slopes vary, but will be 2:1 (*horizontal to vertical*) or flatter. Impacts are considered less than significant and no additional avoidance, minimization or mitigation measures are proposed.

2.2.3 Hazardous Waste/Materials

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

A hazardous waste evaluation determined that aerially deposited lead and lead based paint may exist within the project limits. Lead-contaminated soil exists along the state right of way due to the historical use of leaded gasoline, leaded airline fuels, waste incineration, etc. Based on the rural location of project, the soil generated from roadway excavation, blasting, and roadway cut does not require special soil handling and may be reused on site as non hazardous soil. Lead/chromium based paint may have been used in the traffic stripes.

Environmental Consequences

The measures listed below will be implemented to avoid and minimize impacts. Impacts due to hazardous waste are considered less than significant.

Avoidance and Minimization Measures

- Per the requirements of the California Code of Regulations Title 8, Section 1532.1, the “Lead in Construction” standard, the contractor(s) shall implement a project-specific Lead Compliance Plan (LCP) prepared by a Certified Industrial Hygienist (CIH) as required by Cal/OSHA to prevent or minimize worker exposure to lead-contaminated soil.
- Surplus excavated soil if any shall not be disposed of outside the project limits. Caltrans handling procedures for soil must include Dust Control, Spillage Prevention, and Air Quality Monitoring during construction.
- The contractor’s bid package shall include the Caltrans Non-Standard Special Provision “15-027” to address soil disturbing activities that could result in lead exposure.
- The contractor’s bid package shall include the Caltrans Standard Special Provision “14-001” if the project includes a work item for removal of paint or thermoplastic (yellow or white paint) from the road surface.
- The contractor’s bid package shall include the Caltrans Standard Special Provision “15-305” if yellow paint or yellow thermoplastic paint will be removed while grinding the entire pavement surface and the project will not require the paint or thermoplastic paint to be removed before grinding begins.

2.2.4 Air Quality

Regulatory Setting

The Federal Clean Air Act (FCAA) as amended in 1990 is the federal law that governs air quality. The California Clean Air Act of 1988 is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and

California Air Resources Board (ARB), set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and State ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns. The criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM, broken down for regulatory purposes into particles of 10 micrometers or smaller – PM₁₀ and particles of 2.5 micrometers and smaller – PM_{2.5}), lead (Pb), and sulfur dioxide (SO₂). In addition, State standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H₂S), and vinyl chloride. The NAAQS and State standards are set at a level that protects public health with a margin of safety, and are subject to periodic review and revision. Both State and Federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics within their general definition.

Federal and State air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). In addition to this type of environmental analysis, a parallel “Conformity” requirement under the FCAA also applies.

FCAA Section 176(c) prohibits the U.S. Department of Transportation and other Federal agencies from funding, authorizing, or approving plans, programs or projects that are not first found to conform to State Implementation Plan (SIP) for achieving the goals of Clean Air Act requirements related to the NAAQS. “Transportation Conformity” takes place on two levels: the regional, or planning and programming, level, and the project level. The proposed project must conform at both levels to be approved. Conformity requirements apply only in nonattainment and “maintenance” (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 CFR 93 govern the conformity process.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the standards set for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and in some areas sulfur dioxide (SO₂). California has attainment or maintenance areas for all of these transportation-related “criteria pollutants” except SO₂, and also has a nonattainment area for lead (Pb). However, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all of the transportation projects planned for a region over a period of at least 20 years for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity is based on use of travel demand and air quality models to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that requirements of the Clean Air Act and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA), make determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept, scope, and “open to traffic” schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is “nonattainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter (PM₁₀ or PM_{2.5}). A region is “nonattainment” if one or more of the monitoring stations in the region measures violation of the relevant standard and U.S. EPA officially designates the area nonattainment. Areas that were previously designated as nonattainment areas but subsequently meet the standard may be officially redesignated to attainment by U.S. EPA and are then called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific procedural and documentation standards for projects that require a hot spot analysis. In general, projects must not cause the “hot spot”-related standard to be violated, and must not cause any increase in the number and severity of violations in nonattainment areas. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

Climate change is analyzed in Section 2.4. Neither the United States Environmental Protection Agency (U.S. EPA) nor Federal Highway Administration (FHWA) has promulgated explicit guidance or methodology to conduct project-level greenhouse gas analysis. As stated on FHWA’s climate change website (<http://www.fhwa.dot.gov/hep/climate/index.htm>), climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will facilitate decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project level decision-making. Climate change considerations can easily be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

Because there have been more requirements set forth in California legislation and executive orders regarding climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this environmental document and may be used to inform the National Environmental Policy Act (NEPA) decision. The four strategies set forth by FHWA to lessen climate change impacts do correlate with efforts that the State has undertaken and is undertaking to deal with transportation and climate change; the strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and reduction in the growth of vehicle hours travelled.

Affected Environment

This project is exempt from all air quality conformity analysis requirements per Table 2 of 40 Code of Federal Regulations (CFR) §93.126, subsection “Safety” (“Highway Safety Improvement Program implementation”). No further analysis is required.

Environmental Consequences

Temporary impacts to air quality may occur during construction. These temporary impacts are considered less than significant. Avoidance and minimization measures shall be implemented to reduce temporary air quality impacts during construction.

Avoidance and Minimization Measures

The proposed project may result in the generation of short-term construction-related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as windblown dust or PM₁₀, would be the primary short-

term construction impact, which may be generated during excavation, grading and hauling activities. However, both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature. Caltrans Standard Specifications, a required part of all construction contracts, should effectively reduce and control emission impacts during construction. The provisions of Section 14-9.02, Air Pollution Control, and Section 14-9.03 Dust Control require the contractor to comply with all pertinent rules, regulations, ordinances, and statutes of the local air district.

2.2.5 Noise

Regulatory Setting

From Title 23, Part 772 of the Code of Federal Regulations, "Procedures for Abatement of Highway Traffic Noise", and Caltrans' noise analysis policy described in Construction Noise and Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (Protocol) (California Department of Transportation 1998a), noise mitigation/abatement must be considered for Type I projects. A Type I project is defined by 23 CFR 772 as follows: A proposed Federal or Federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes.

Affected Environment

This project is not considered a Type I project as defined by Caltrans' Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects. Therefore, no traffic noise analysis is required.

Environmental Consequences

Temporary impacts due to noise may occur during construction. These temporary impacts are considered less than significant. Avoidance and minimization measures shall be implemented to reduce temporary noise impacts during construction.

Avoidance and Minimization Measures

During the construction phases of the proposed project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans standard specifications Section 14-8, "Noise and Vibration." These requirements provide measures to reduce noise during construction.

2.3 BIOLOGICAL ENVIRONMENT

2.3.1 Natural Communities

Regulatory Setting

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed in the Threatened and Endangered Species section. Wetlands and other waters are discussed in the next section.

Affected Environment

The general project area consists of rolling to steep terrain comprised predominantly of oak woodlands with some pine tree species interspersed. Ruderal habitat and vegetative species are present along the roadside. The majority of oaks observed within project limits were interior live oaks. Ponderosa pines and gray pines were interspersed, mainly on the southwest side of the project area. Several blue oaks were observed mainly on the northeast end of the project, and a black oak was observed at the southeast part of the project area.

The 90 inch culvert is large enough to be used for wildlife migration; however no evidence of wildlife use was observed by Caltrans biologists during several field visits. In addition, the following efforts were made to determine the presence of wildlife:

- The project biologist contacted the Caltrans Maintenance Supervisor who covers El Dorado County. The supervisor stated that in his 30 years with Caltrans Maintenance and working in El Dorado County, he has seen very little road kill in the project area, or vicinity of the project.
- The Caltrans Traffic Safety Department ran a Transportation Systems Network (TSN), (formally known as "TASAS") report that centered on wildlife mortality. The report queried Post Miles (PMs) 0.8 to 6.8 (project area PMs are 3.76 to 3.92), and showed that in the last five years, there have been two accidents that involved deer within the six mile stretch of highway queried. The accidents occurred in 2007 and 2009; one was located at PM 2.23, the other at PM 6.16, both outside of the project limits.
- The California Roadkill Observations website developed by Dr. Shilling of UC Davis was reviewed to obtain data regarding wildlife mortality in the project area. According to the website, the nearest roadkill wildlife mortalities have occurred approximately six miles to the southeast of the project area, near Fiddletown, and approximately six miles to the northeast of the project area near Diamond Springs, however; there are no roadkill mortalities shown within or adjacent to project limits.

Environmental Consequences

The existing 90 inch culvert will be extended and paved with concrete. Cobbles will also be placed to develop a "natural" (like) bottom. If wildlife is using the culvert, the extension of

the culvert is not expected to worsen the existing condition. No adverse impacts to wildlife corridors or habitat fragmentation are anticipated.

There will be approximately 0.88 acre of oak woodlands (with some pine interspersed) removed on the east side of SR 49 (the inside of the curve) to improve sight distance and to realign the curve slightly, and 0.03 acre of tree removal on the west side of the highway where the slope will be cut back. The trees have been estimated at 24 inches (or less) diameter at breast height (dbh). These trees are not considered a riparian impact due to the nature of the ephemeral channels within project limits. In addition, the surrounding area consists of similar oak woodland habitat.

The slope on the inside of the curve will be replanted with shrubs and oaks will be replanted within Caltrans right of way where feasible per mitigation requirements listed in the visual resources section. Due to the small size of the project area and the abundance of adjacent habitat, impacts to oak woodlands are considered less than significant. However, compensation for the loss of oak trees may be a requirement of the CDFG 1602 Lake and Streambed Alteration Permit.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act [CWA (33 USC 1344)] is the primary law regulating wetlands and surface waters. The CWA regulates the discharge of dredged or fill material into waters of the United States (U.S.), including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the Clean Water Act establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the Environmental Protection Agency (EPA).

USACE issues two types of 404 permits: Standard and General permits. Nationwide permits, a type of General permit, are issued to authorize a variety of minor project activities with no more than minimal effects. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard permits. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (U.S. EPA 40 CFR Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that

would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the FHWA and/or Caltrans, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the California Department of Fish and Game (CDFG), the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications for impacts to wetlands and waters in compliance with Section 401 of the CWA. Please see the Water Quality section for additional details.

Affected Environment

Ramales Lane is located on the west side of the curve area, and serves as access to several residences. Immediately south of the intersection of Ramales Lane and SR 49 is an ephemeral drainage (containing water for short periods) that runs under the highway through a 90" culvert. This drainage is on average, approximately three feet wide, and approximately two feet deep when measured from the top of bank. It is incised, making it narrower at the bottom. A second ephemeral drainage located at the northeast end of the project area is approximately two feet wide and approximately one to two feet deep on average. This drainage runs parallel to the roadway in a roadside ditch and then crosses under the highway through a 12" culvert.

At the time of the preliminary field visit on February 19, 2009, a large storm event lasting for approximately a week had ended the previous day. The channel with the 90" culvert was carrying approximately 1-2 inches of water, and the smaller channel was dry. This fact illustrates that this is an ephemeral drainage, carrying water only after rain events. Both drainages have been dry on subsequent field visits. These drainages are considered waters of the U.S. because they have connectivity with the North Fork of the Cosumnes River. There are no wetlands within project limits.

Environmental Consequences

The 90" culvert will be extended 47 ft at the outlet and a headwall will be constructed and the 12" culvert will be replaced with an 18" culvert. Below is a table showing impacts to waters of the U.S. within the project limits.

TABLE 3: IMPACTS TO WATERS OF THE U.S.

		Upstream						Downstream					
		Temporary Impact			Permanent Impact			Temporary Impact			Permanent Impact		
		lf	sf/ac	yds ³	lf	sf/ac	yds ³	lf	sf/ac	yds ³	lf	sf/ac	yds ³
PM 3.84	90" culvert and channel*	0	0	0	16	48/0.001	3.56	80	240/0.006	17.78	46	138/0.003	5.11
PM 3.91	12" culvert and channel*	0	0	0	3	6/0.0001	0.33	0	0	0	20	40/0.001	2.22

* Lengths do not include the original culvert lengths

ac = acre sf = square feet
lf = linear feet yds³ = cubic yards

In addition to the ephemeral drainages, approximately 770 linear feet of the roadside ditch will be paved. The portion of the ditch to the north of Ramales Lane (approximately 360 feet in length) conveys water into both ephemeral drainages and is considered other waters. The ditch is approximately 6 inches deep on average, and will be reconstructed in-kind, and paved to a width of 3 feet. Permanent impacts would total 0.74 yds³, 1080 ft²/0.02 ac.

The portion of the roadside ditch to the south of Ramales Lane (approximately 410 feet in length) functions in roadside/stormwater runoff and is not being considered as other waters.

Impacts to waters of the U.S. and other waters are considered less than significant. The following permits will be required prior to construction. Applications will be submitted after final environmental approval.

- US Army Corps of Engineers (USACE) Section 404 Non-Reporting Nationwide permit for filling or dredging waters of the United States
- California Department of Fish and Game (CDFG) 1602 Agreement for Streambed Alteration
- Central Valley Regional Water Quality Control Board (CVRWQCB) Section 401 Water Quality Certification

Avoidance and Minimization Measures

All streambanks will be stabilized, and erosion control measures as well as Caltrans best management practices (BMPs) will be implemented. In addition, the project area will be left in pre-construction condition. All permit conditions will be adhered to.

2.3.3 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The US Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the state or federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the section below. All other special-status animal species are discussed here, including CDFG fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations pertaining to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

Affected Environment

Field visits were performed during March, April, and August and several bird species were observed including bushtits, western scrub-jay, yellow-billed magpie, house sparrow, turkey vulture, red-tailed hawk, acorn woodpecker, and an unknown hummingbird species. An unknown snake was also observed and tracks from a black-tailed deer were observed.

Environmental Consequences

This project requires tree removal and therefore has the potential to affect nesting birds. With the implementation of work windows, impacts to nesting birds are not anticipated.

Avoidance and Minimization Measures

All tree removal will be scheduled outside of the nesting season (February 15 – September 1). If the project activities begin within the nesting season due to the construction schedule, every effort will be made to remove the trees prior to this timeframe in order to avoid any nesting issues. If this cannot be done, a nesting bird survey will be conducted approximately two weeks prior to any ground disturbance. If any active nests are found, the appropriate buffer zones will be established around them, resource agency personnel will be contacted, and no work will be conducted within these areas.

2.3.4 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 USC Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the FHWA, are required to consult with the USFWS and

NOAA Fisheries Service to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an Incidental Take statement. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

Caltrans Biologists visited the project site on February 19, March 16, April 2, April 15, and August 5, 2009. Prior to conducting the initial field visit the following resources were consulted for species and habitat information: 1) CDFG's California Natural Diversity Database (CNDDDB), 2) CDFG's 'BIOS' mapping program, 3) USFWS sensitive species quad lists, 4) USGS 7.5-minute quadrangle maps, 5) Natural Resources Conservation Service (NRCS) soil survey maps, and 6) aerial photography of the area. CNDDDB and USFWS lists were last consulted on September 29, 2009. A table of sensitive species can be found in Appendix B. This table includes a short explanation (rationale) of Caltrans findings regarding whether or not the project would affect any of the listed species.

Based on record searches and field visits it was determined that potential habitat was present for the California red-legged frog (CRLF). However, there are no suitable water resources within or adjacent to the project area that would sustain breeding or metamorphosis. The distances between ponds to east and west of project are greater than CRLF typically travel/migrate. There have been no observations of CRLF recorded within or adjacent to the project area.

An Initial Site Assessment (ISA) was submitted to the USFWS on April 9, 2009 for their input and analysis of the project area as to whether CRLF would be affected by project activities. On June 22, 2009, the USFWS commented via e-mail that in review of the site assessment, protocol surveys for the frog are not warranted, as there does not appear to be suitable breeding habitat within dispersal distance.

Environmental Consequences

No impacts to special status species are anticipated to occur as a result of this project and no avoidance, minimization or mitigation measures are proposed.

2.4 CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gases (GHGs), particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization's in 1988, has led to increased efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs related to human activity that include carbon dioxide (CO₂), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas (GHG) Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts due to climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels)¹.

Transportation sources (passenger cars, light duty trucks, other trucks, buses and motorcycles) in the state of California make up the largest source (second to electricity generation) of greenhouse gas emitting sources. Conversely, the main source of GHG emissions in the United States (U.S.) is electricity generation followed by transportation. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improve system and operation efficiencies, 2) reduce growth of vehicle miles traveled (VMT) 3) transition to lower GHG fuels and 4) improve vehicle technologies. To be most effective all four should be pursued collectively. The following regulatory setting section outlines state and federal efforts to comprehensively reduce GHG emissions from transportation sources.

Regulatory Setting

State

With the passage of several pieces of legislation including State Senate and Assembly Bills and Executive Orders, California launched an innovative and pro-active approach to dealing with greenhouse gas emissions and climate change at the state level.

Assembly Bill 1493 (AB 1493), Pavley. Vehicular Emissions: Greenhouse Gases (AB 1493), 2002: requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck greenhouse gas emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year. In June 2009, the U.S. Environmental Protection Agency (U.S. EPA) Administrator granted a Clean Air Act waiver of preemption to California. This waiver

¹ http://climatechange.transportation.org/ghg_mitigation/

allowed California to implement its own GHG emission standards for motor vehicles beginning with model year 2009. California agencies will be working with Federal agencies to conduct joint rulemaking to reduce GHG emissions for passenger cars model years 2017-2025.

Executive Order S-3-05: (signed on June 1, 2005, by Governor Arnold Schwarzenegger) the goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.

AB32 (AB 32), the Global Warming Solutions Act of 2006: AB 32 sets the same overall GHG emissions reduction goals as outlined in Executive Order S-3-05, while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the State's Climate Action Team.

Executive Order S-01-07: Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this Executive Order, the carbon intensity of California's transportation fuels is to be reduced by at least ten percent by 2020.

Senate Bill 97 (Chapter 185, 2007): required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the State CEQA Guidelines for addressing greenhouse gas emissions. The Amendments became effective on March 18, 2010.

Federal

Although climate change and GHG reduction is a concern at the federal level; currently there are, no regulations or legislation that have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor Federal Highway Administration (FHWA) has promulgated explicit guidance or methodology to conduct project-level greenhouse gas analysis. As stated on FHWA's climate change website (<http://www.fhwa.dot.gov/hep/climate/index.htm>), climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will facilitate decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project level decision-making. Climate change considerations can easily be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies set forth by FHWA to lessen climate change impacts do correlate with efforts that the State has undertaken and is undertaking to deal with transportation and climate change; the strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and reduction in the growth of vehicle hours travelled. Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the "National Clean Car Program" and Executive Order 13514- *Federal Leadership in Environmental, Energy and Economic Performance*.

Executive Order 13514 is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also direct federal agencies to participate in the interagency Climate Change Adaptation Task Force, which is engaged in developing a U.S. strategy for adaptation to climate change.

On April 2, 2007, in *Massachusetts v. EPA*, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act and that the U.S. EPA has the authority to regulate GHG. The Court held that the U.S. EPA Administrator must determine whether or not emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator found that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the U.S. EPA's *Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles*, which was published on September 15, 2009². On May 7, 2010 the final *Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards* was published in the Federal Register. U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations. These steps were outlined by President Obama in a memorandum on May 21, 2010.³

The final combined U.S. EPA and NHTSA standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon (MPG) if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards will cut GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On January 24, 2011, the U.S. EPA along with the U.S. Department of Transportation and the State of California announced a single timeframe for proposing fuel economy and

² <http://www.epa.gov/climatechange/endangerment.html>

³ <http://epa.gov/otaq/climate/regulations.htm>

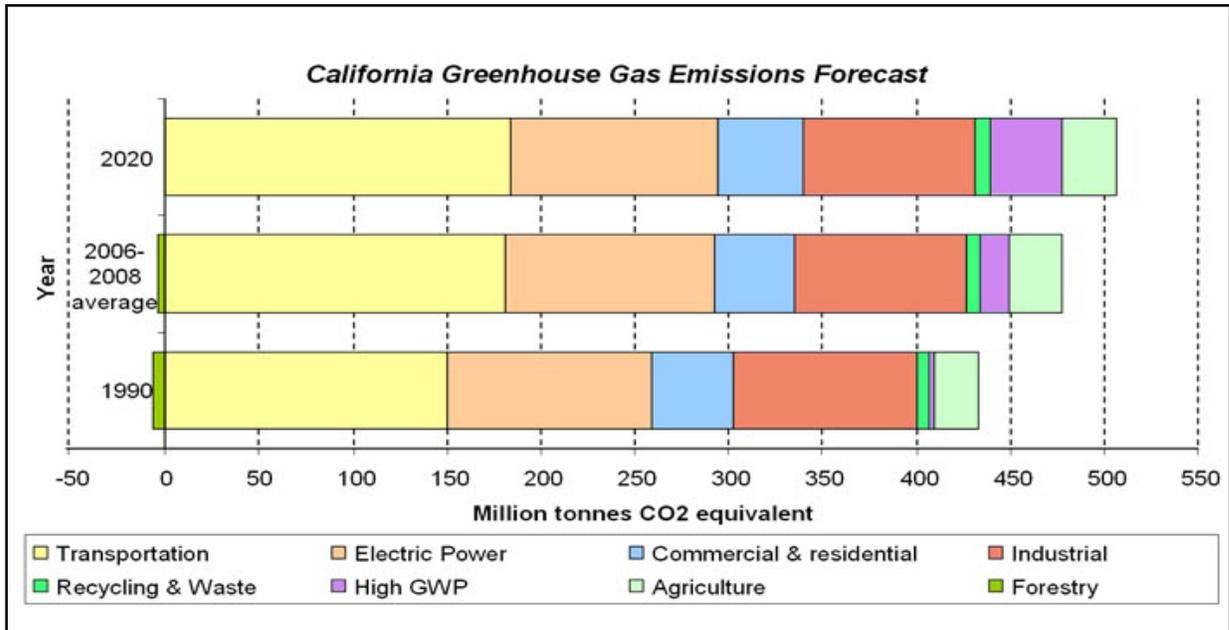
greenhouse gas standards for model years 2017-2025 cars and light-trucks. Proposing the new standards in the same timeframe (September 1, 2011) signals continued collaboration that could lead to an extension of the current National Clean Car Program.

Project Analysis

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG.⁴ In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable.” See California Environmental Quality Act (CEQA) Guidelines sections 15064(h)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

The AB 32 Scoping Plan contains the main strategies California will use to reduce GHG. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (Forecast last updated: 28 October 2010). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

FIGURE 6: CALIFORNIA GREENHOUSE GAS FORECAST



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

⁴ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the SCAQMD (Chapter 6: : The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006 (see Climate Action Program at Caltrans (December 2006)).⁵

The proposed project will not increase the vehicular capacity of State Route 49 as the roadway will be re-constructed with the same lane configuration and capacity as the existing roadway. The proposed project is expected to improve safety and reduce the number of collisions by improving the existing curve radius as well as improve sight distance and thus reduce congestion related to vehicular accidents. Because the project would not increase capacity nor vehicle hours travelled, no increases in operational GHG emissions are anticipated. While construction emissions of greenhouse gases are unavoidable, there will likely be long term benefits with improved safety, operation and smoother pavement surface.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

CEQA Conclusion

While it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement the Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Former Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding during the next

⁵ Caltrans Climate Action Program is located at the following web address:
http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

decade. The Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together are expected to reduce congestion. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as depicted in the figure below.

FIGURE 7: THE MOBILITY PYRAMID



Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by U.S. EPA and ARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the UC Davis.

Table 4 summarizes Caltrans' and statewide efforts that Caltrans is implementing in order to reduce GHG emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

TABLE 4: CLIMATE CHANGE/CO2 REDUCTION STRATEGIES

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	.0045	.0065 .045 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	4.2 3.6
Goods Movement	Office of Goods Movement	Cal EPA, CARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

CHAPTER 3 COMMENTS AND COORDINATION

The Draft Initial Study (IS) was circulated for public review from June 10, 2011 to July 11, 2011.

A "Notice of Intent to Adopt a Negative Declaration and Announcement of Public Open House (Notice)" ran in the Mountain Democrat newspaper on June 10, 2011. The Notice was sent to property owners directly affected by the project and known interested individuals. The Notice was also posted at various locations within the project area.

The Draft IS was made available online. A public open house was held at the Diamond Springs/El Dorado Fire Protection District on June 23, 2011. During the public circulation period six comments were received regarding the project, including those received during the public open house. The comment letters can be found on the following pages in alphabetical order. The responses to comments can be found following this paragraph.

Responses to Comments Received During Circulation

Central Valley Regional Water Quality Control Board

Caltrans' NPDES unit acknowledges the instructions related to the implementation of the Construction General Permit (CGP) and MS4 Permit - when and where applicable. Due to the nature of work and anticipated Disturbed Soil Area (DSA) involved, it has been determined this project shall address potential storm water related issues and mitigation measures, during construction operations, with a Water Pollution Control Plan. If there are significant changes to the nature of work, scope, or anticipated DSA, adherence to the CGP requirements shall be implemented accordingly. Previously conducted technical studies have indicated the project location to be within the El Dorado County MS4 Permit boundary; adherence to these permit specific requirements shall be followed so as to be in compliance with the local jurisdiction of authority.

Smart, Bob

In response to concerns regarding wildlife crossing, efforts were made to determine the extent of use of the culvert by wildlife. The data obtained does not suggest high occurrence of wildlife movement (Please see Section 2.3.1 for additional information). Therefore, major improvements to the culvert for wildlife crossing are not warranted and not within the scope of this safety project. However, the existing culvert will be extended and paved with concrete. Cobbles will also be placed to develop a "natural" (like) bottom. If wildlife is using the culvert, the extension of the culvert is not expected to worsen the existing condition.

Responses to Comments Received During Open House

Boylan, Dr. Richard

As explained in Section 1.4, the purpose of this project is to improve the safety of the highway within the project limits. As the agency responsible for operating the highway, Caltrans must address the collision pattern. Caltrans has previously tried lower impact efforts to address the collision pattern, but the pattern persisted.

Caltrans adheres to certain standards for highways based on the type of highway, its location, traffic volumes, and other factors. State Route 49 in the project vicinity is a rural two-lane

highway in mountainous terrain, and some of the design standards detailed in the *Highway Design Manual (HDM)* for the roadway are:

- Design Speed (*HDM* Topic 101.2).....40 to 50 mph
- Minimum Horizontal Radius (*HDM* Topic 203.2).....550 ft (for 40 mph)
- Shoulder Width (*HDM* Topic 307.2 and *Design Bulletin 79*).....8 ft minimum
- Roadway Grade (*HDM* Topic 204.3).....7% or less
- Lane Width (*HDM* Topic 301.1 and *Design Bulletin 79*).....12 ft minimum
- Side Slopes (*HDM* Topic 304.1).....4:1 (horizontal:vertical) or flatter

Caltrans strives to balance competing interests, such as environmental concerns, transportation efficiency and safety in its projects. Based upon the nature of the facility and the surrounding environment, approval was given by Caltrans geometricians to proceed with a design which did not meet all of the above criteria, yet still improved driver safety. This design eliminates the existing compound curve, increases the roadway superelevation, and improves driver line of sight through the curve while minimizing the project footprint and associated environmental impacts. Caltrans expects that this design will reduce collisions at this location.

Newell, Kathleen

See response above for Smart, Bob regarding wildlife crossing.

The proposed project would remove only those trees necessary for construction. Every effort will be made to preserve trees that are not required to be removed. Following construction, standard erosion control measures will be implemented to protect disturbed soil. Revegetation efforts shall also include replanting of shrubs and trees where feasible.

Following approval of the final environmental document, Caltrans R/W department will begin working with property owners regarding acquisition of the areas of their parcels that are needed for construction and any other concerns that the property owners have.

Smart, Bob

See response above for Smart, Bob regarding wildlife crossing.

Taylor, Sue

See response above for Newell, Kathleen in regards to tree removal.



Linda S. Adams
Acting Secretary for
Environmental Protection

**California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair**

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
<http://www.waterboards.ca.gov/centralvalley>



Edmund G. Brown Jr.
Governor

7 July 2011

Jennifer Clark
California Department of Transportation
703 B Street
Marysville, CA 95901

CERTIFIED MAIL
7010 3090 0001 4843 2749

**COMMENTS TO DRAFT MITIGATED NEGATIVE DECLARATION, STATE ROUTE 49
CURVE IMPROVEMENT PROJECT, SCH NO. 2011062033, EL DORADO COUNTY**

Pursuant to the State Clearinghouse's 10 June 2011 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Draft Mitigated Negative Declaration* for the State Route 49 Curve Improvement Project, located in El Dorado County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

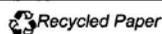
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards,

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

California Environmental Protection Agency



also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed for the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916)557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit, or any other federal permit, is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. Water Quality Certification must be obtained prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

If you have questions regarding these comments, please contact me at (916) 464-4745 or gsparks@waterboards.ca.gov.



Genevieve (Gen) Sparks
Environmental Scientist
401 Water Quality Certification Program

cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

Robert A. Smart, Jr.
4520 Lon Court
Diamond Springs, CA. 95619
June 25, 2011

Suzanne Melim, Environmental Branch Chief
Caltrans Environmental Planning
703 B Street, Marysville, CA 95901

Attention: Jennifer S. Clark
Subject: **State Route 49 Curve Improvement**

Caltrans has a great opportunity to enhance two frequently competing interests with the State Route 49 Curve Improvement project; improve public safety for motorists and improve the permeability of the landscape for wildlife.

If the existing 90 inch pipe and new extension are retrofitted to enhance animal passage we could learn more about how to mitigate animal movement impacts caused by our major roadways; a rapidly emerging issue. The retrofitting should include work on the floor of the pipe to provide better animal footing and the maintenance/enhancement of vegetative screening at both ends. This work should help animals in the area and will expand our knowledge about animal passage at a relatively low cost.

I believe you will find the work of Dr. Fraser Shillings at the University of California at Davis would be a good information source.

Please let me know if you have any questions; we have to figure out how to minimize our road impacts on animals as they move across our landscapes. This is a great opportunity for Caltrans to demonstrate leadership in finding solutions to known problems.

Sincerely,

/s/ Robert A. Smart, Jr.
Robert A. Smart, Jr.

ccs: Ray Nutting, El Dorado County Board of Supervisors
Jack Sweeney, El Dorado County Board of Supervisors
Rich Platt, El Dorado County Fish and Game Commission
Kathy Mathews, Executive Director, El Dorado County Transportation Commission

ED 49 Curve Improvement
OPEN HOUSE
Thursday, June 23, 2011, 6:00-8:00 P.M.
COMMENT SHEET

Name: Dr. Richard Boylan

Organization/ Business Affiliation (if applicable): PICO

Address: P.O. BOX 1009, DIAMOND SPRINGS, CA 95619

E-Mail Address: DRBOYLAN@SBCGLOBAL.NET

Comments: The proposed "solution" is way too drastic, involves over-engineering of a rural historic roadway into a parkway-style road, involves the totally unnecessary destruction of old-growth oak woodlands, and only promotes the excessive speeds it purports to resolve.

Dr. Richard Boylan, Ph.D.

Completing and signing this document is voluntary. Caltrans may use this information for statistical purposes, to notify you of any future hearings, or to assist in providing you with further information. This document is public record and may be subject to inspection and copying by other members of the public.

Please deposit this sheet into the comment box before the end of the public meeting (8:00 p.m.). Or if you wish, send your comments by mail to Caltrans, 703 B Street, Marysville, CA 95901 or by e-mail to Jennifer.Clark@dot.ca.gov. **Comments must be postmarked by July 10, 2011**



ED 49 Curve Improvement
OPEN HOUSE
Thursday, June 23, 2011, 6:00-8:00 P.M.
COMMENT SHEET

Name: Kathleen Newell 6/23/11

Organization/ Business Affiliation (if applicable): NONE

Address: 4576 Foothill Drive Shingle Springs CA 95692

E-Mail Address: knewell@live.com

Comments: I'd like to encourage animal crossing tunnel/culvert
design. Keep oak removal to a minimum - especially
Blue Oaks... prudence after construction to
keep erosion from happening in area of oak
removal. Work closely w/ land owners with any
concerns they have.

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ED 49 Curve Improvement
OPEN HOUSE
Thursday, June 23, 2011, 6:00-8:00 P.M.
COMMENT SHEET

Name: Bob Smart

Organization/ Business Affiliation (if applicable): _____

Address: 4520 Lon Court

E-Mail Address: rsmart41@comcast.net

Comments: This project is a great opportunity to blend wildlife needs w/ public safety. The existing 90" pipe ~~is~~ could be enhanced to model the state of the art for allowing animal passage under the road way. Animals currently climb up onto the road way and then try to figure out how to get up the cuts. Suggest Dr. Fraiser Shillings @ U.C. Davis, who has worked w/ Caltrans in the past, could be of assistance.

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ED 49 Curve Improvement
OPEN HOUSE
Thursday, June 23, 2011, 6:00-8:00 P.M.
COMMENT SHEET

Name: Sue Taylor

Organization/ Business Affiliation (if applicable): Save Our County

Address: P.O. Box 961, Camino CA 95709

E-Mail Address: SUE-TAYLOR@COMCAST.NET

Comments: Hopefully the engineering will be better than
the last realignment project on 49. Please minimize amount
of trees necessary to remove. Good safety project.

Completing and signing this document is voluntary. Caltrans may use this information for statistical purposes, to notify you of any future hearings, or to assist in providing you with further information. This document is public record and may be subject to inspection and copying by other members of the public.

Please deposit this sheet into the comment box before the end of the public meeting (8:00 p.m.). Or if you wish, send your comments by mail to Caltrans, 703 B Street, Marysville, CA 95901 or by e-mail to Jennifer.Clark@dot.ca.gov. **Comments must be postmarked by July 10, 2011**



CHAPTER 4 LIST OF PREPARERS AND TECHNICAL STUDIES

The following people assisted in preparing and evaluating this Initial Study and coordinating documents:

Alicia Beyer	Environmental Engineer, Hazardous Waste
Jennifer Clark	Associate Environmental Planner
Kevin Evarts	Former Caltrans Transportation Engineer, Water Quality
Suzanne Melim	Senior Environmental Planner
Kelley Nelson	Associate Environmental Planner, Biology
Richard Olson	Associate Environmental Planner, Archaeology
Christine Ottaway	Landscape Associate
Sharon Tang	Transportation Engineer, Air and Noise
Saeid Zandian	Transportation Engineer, Air and Noise

The following technical reports were prepared in order to analyze the potential effects this project may have on the environment and to assist in preparing this Initial Study/ Environmental Assessment. These documents are available for review at the Caltrans North Region Office of Environmental Management, 2379 Gateway Oaks Drive, Suite 150, Sacramento, CA 95833.

Screening Memo for Cultural Resources (some portions may not be available for public review)

- Initial Site Assessment for Hazardous Waste
- Natural Environment Study
- Air Quality Assessment
- Noise Assessment
- Water Quality Assessment
- Visual Impact Assessment

CHAPTER 5 DISTRIBUTION LIST

This document has been made available online at the following website:

<http://www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm>

A Notice of Intent to adopt a Mitigated Negative Declaration was mailed to the following individuals and agencies:

Property owners directly affected by the project
El Dorado County Agricultural Commissioner
El Dorado County Board of Supervisors
El Dorado County Recorder-Clerk
El Dorado County Department of Transportation
El Dorado County Transportation Commission
El Dorado County Planning Services
El Dorado County Main Library in Placerville (to make available for public review)
State Clearinghouse (to be distributed to various state agencies)
Jamie Beutler
Bob Smart

A notice will be sent to all individuals/agencies that commented on the Draft Initial Study informing them when the Final Initial Study has been approved and where they can view or obtain a copy of the document.

APPENDIX A CEQA CHECKLIST

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

IV. BIOLOGICAL RESOURCES: Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. CULTURAL RESOURCES: Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VI. GEOLOGY AND SOILS: Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. GREENHOUSE GAS EMISSIONS: Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IX. HYDROLOGY AND WATER QUALITY: Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. LAND USE AND PLANNING: Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XI. MINERAL RESOURCES: Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII. NOISE: Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIII. POPULATION AND HOUSING: Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. PUBLIC SERVICES:

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

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

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
--	--------------------------------	---------------------------------------	------------------------------	-----------

XV. RECREATION:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XVI. TRANSPORTATION/TRAFFIC: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

APPENDIX B SENSITIVE SPECIES LIST

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent (P/A)	Rationale
Invertebrates					
valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT	Elderberry bushes are sole host plant. Generally in riparian areas.	A	No elderberry bushes were observed within or adjacent to the project area.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	Vernal pools	A	There are no vernal pools within project limits.
Fish					
delta smelt	<i>Hypomesus transpacificus</i>	FT	Brackish water.	A	No suitable habitat present within project limits.
Central Valley steelhead	<i>Oncorhynchus mykiss</i>	FT (NMF S)	Cool, clear water. Pools w/ abundant escape cover. Gravel beds.	A	No suitable habitat present within project limits.
Central Valley spring-run Chinook salmon	<i>Oncorhynchus tshawytscha</i>	FT (NMF S)	Spawns in deeper water and larger gravel sizes.	A	No suitable habitat present within project limits.
winter-run Chinook, Sacramento River	<i>Oncorhynchus tshawytscha</i>	FE (NMF S)	Prefer deep, large streams.	A	No suitable habitat present within project limits.
Amphibians					

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent (P/A)	Rationale
California red-legged frog	<i>Rana aurora draytonii</i>	FT, FX	Permanent water sources for breeding. Woodlands, grasslands and streambanks with plant cover.	P	Potential upland dispersal habitat is present, however, there are no suitable water resources within or adjacent to the project area that would sustain breeding or metamorphosis. Distance between ponds to east and west of project area are greater than CRLF typically travel/migrate. There have been no observations of CRLF recorded within or adjacent to the project area.
foothill yellow-legged frog	<i>Rana boylei</i>	SC	Shallow, slow, gravelly streams and rivers with sunny banks in forest, chaparral, woodlands.	A	No suitable habitat within project limits. No records of this species within project area.
Reptiles					
western pond turtle	<i>Emys marmorata</i>	SC	Ponds, lakes, streams, etc. with abundant vegetation and basking sites	A	No suitable habitat present within project limits. No basking sites.
coast horned lizard	<i>Phrynosoma coronatum (frontale population)</i>	SC	Open areas of sandy soil and low vegetation in valleys, foothills and semi-arid mountains.	A	No suitable habitat within project limits.
Birds					
tricolored blackbird	<i>Agelaius tricolor</i>	SC	Herbaceous wetlands, croplands, grasslands, fresh water marshes with tule, cattails, bulrush, etc.	A	No suitable habitat within project limits.
Mammals					

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (P/A)	Rationale
Fisher (Distinct Population Segment - DPS)	<i>Martes pennanti</i>	FC	Lives in thick coniferous or mixed coniferous and hardwood forests. It prefers habitats with lots of tree cover and lots of hollow trees for dens.	A	No suitable habitat within project limits.
Plants					
Jepson's onion	<i>Allium jepsonii</i>	CNPS	Woodlands and broad-leaved, especially oaks, coniferous trees. Usually on slopes of serpentine or volcanic rock.	A	No suitable habitat within project limits.
Nissenan manzanita	<i>Arctostaphylos nissenana</i>	CNPS	Open, rocky ridges in coniferous forests and chaparral from 1476-3609 ft.	A	Project area is approx. 863 ft in elevation. No record of this species within or adjacent to project limits.
Pleasant Valley mariposa-lily	<i>Calochortus clavatus var. avius</i>	CNPS	Dry, rocky slopes, chaparral, often on serpentine	A	No appropriate habitat within project limits. Project area is comprised of very rocky silt loam and very rocky loam soils per NRCS records. No record of this species within or adjacent to project limits.
Stebbin's morning-glory	<i>Calystegia stebbinsii</i>	FE, SE, CNPS	Associated with chaparral or gabbro (volcanic)-derived soils.	A	No appropriate habitat within project limits. Project area is comprised of very rocky silt loam and very rocky loam soils per NRCS records. No record of this species within or adjacent to project limits.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent (P/A)	Rationale
Pine Hill ceanothus	<i>Ceanothus roderickii</i>	FE, SR, CNPS	Gabbro soils. Restricted to Pine Hill in El Dorado Co.	A	No appropriate habitat within project limits. Project area is comprised of very rocky silt loam and very rocky loam soils per NRCS records. No record of this species within or adjacent to project limits.
Red Hills soaproot	<i>Chlorogalum grandiflorum</i>	CNPS	Serpentine and gabbro rock sites. Sites are chaparral with soaproot growing in openings.	A	No appropriate habitat within project limits. Project area is comprised of very rocky silt loam and very rocky loam soils per NRCS records. No record of this species within or adjacent to project limits.
Brandegee's clarkia	<i>Clarkia biloba ssp. Brandegeae</i>	CNPS	Foothill woodland, often road cuts. Elev'n of 944-2832 ft	A	Elevation of project is approx.863 ft.
Pine Hill flannelbush	<i>Fremontoden dron californicum ssp. decumbens</i>	FE, SR, CNPS	Scattered rock outcrops between woodland and chaparral. Restricted to gabbro soils.	A	No appropriate habitat within project limits. Project area is comprised of very rocky silt loam and very rocky loam soils per NRCS records. No record of this species within or adjacent to project limits.
El Dorado bedstraw	<i>Galium californicum ssp. Sierrae</i>	FE, SR, CNPS	Chaparral, cismontane woodland, lower montane coniferous forest	A	No appropriate habitat within project limits. No record of this species within or adjacent to project limits.
Bisbee Peak rush-rose	<i>Helianthemum suffrutescens</i>	CNPS	Chaparral (often serpentine, gabbro, or lone substrate)	A	No appropriate habitat within project limits. Project area is comprised of very rocky silt loam and very rocky loam soils per NRCS records. No record of this species within or adjacent to project limits.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent (P/A)	Rationale
Parry's horkelia	<i>Horkelia parryi</i>	CNPS	Chaparral and blue oak-gray pine woodland, dry slopes and openings below 3500 feet	A	No appropriate habitat within project limits. No record of this species within or adjacent to project limits.
Layne's ragwort (=butterweed)	<i>Packera/Sencio layneae</i>	FT, SR, CNPS	Chaparral, cismontaine woodland, lower montane coniferous forest	A	No appropriate habitat within project limits. No record of this species within or adjacent to project limits.

Status Key:

FE = Federally Endangered

FT = Federally Threatened

FT (NMFS) = Federally Threatened (National Marine Fisheries Service)

FC = Federal Candidate

FX = Federal Proposed Critical Habitat

SE = State Endangered

SR = State Rare

SC = CDFG Species of Concern

CNPS = California Native Plant Society's List of Special Status Plant Species

APPENDIX C TITLE VI POLICY STATEMENT

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. Box 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY 711



*Flex your power!
Be energy efficient!*

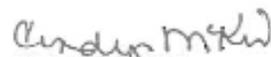
July 20, 2010

TITLE VI POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, or age, please visit the following web page:
http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact Charles Wahnnon, Manager, Title VI and Americans with Disabilities Act Program, California Department of Transportation, 1823 14th Street, MS-79, Sacramento, CA 95811. Phone: (916) 324-1353 or toll free 1-866-810-6346 (voice), TTY 711, fax (916) 324-1869, or via email: charles_wahnnon@dot.ca.gov.


CINDY MCKIM
Director

"Caltrans improves mobility across California"

APPENDIX D AVOIDANCE, MINIMIZATION AND MITIGATION SUMMARY

Visual Resources-Avoidance and Minimization

The following measures will be incorporated into the project:

- Provide erosion control seeding to all new slopes as well as other disturbed areas.
- Root balls from existing trees shall be completely removed.
- Fill material shall be specified, compacted and prepped for replanting with assistance of project landscape architect or project revegetation specialist.
- Provide soil amendments in all fill slopes, in order to support overall plant survival.
- The project team will coordinate with Caltrans Office of Landscape Architecture for all planting plan preparation.

Visual Resources-Mitigation Measures

- Plant oak and other native tree seedlings within the right of way where feasible, and where mature trees will not block sight distances. Final replacement ratios will be determined by the revegetation specialist and the project landscape architect during final design.
- Install native shrub planting where oak trees are slated for removal to enhance the visual quality of the new fill slope and to provide added erosion control for the slopes. Shrub height not to exceed 6 feet at maturity, and mature trunks not to exceed 4" in diameter. Shrubs are recommended so as to avoid placing obstacles in the clear recovery zone or the blocking the site distance.

Cultural Resources-Avoidance and Minimization

- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Caltrans District 3 Environmental Management so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Water Quality-Avoidance and Minimization

- A Water Pollution Control Program (WPCP) will be prepared by the contractor. Appropriate construction site BMPs shall be implemented to avoid and minimize water quality impacts.
- No asphalt concrete (AC) grinding may be placed in shoulder backing at locations where erosion or maintenance operations could result in their deposit into waterways.

Hazardous Waste/Materials-Avoidance and Minimization

- Per the requirements of the California Code of Regulations Title 8, Section 1532.1, the "Lead in Construction" standard, the contractor(s) shall implement a project-specific Lead Compliance Plan (LCP) prepared by a Certified Industrial Hygienist (CIH) as required by Cal/OSHA to prevent or minimize worker exposure to lead-contaminated soil.

- Surplus excavated soil if any shall not be disposed of outside the project limits. Caltrans handling procedures for soil must include Dust Control, Spillage Prevention, and Air Quality Monitoring during construction.
- The contractor's bid package shall include the Caltrans Non-Standard Special Provision "15-027" to address soil disturbing activities that could result in lead exposure.
- The contractor's bid package shall include the Caltrans Standard Special Provision "14-001" if the project includes a work item for removal of paint or thermoplastic (yellow or white paint) from the road surface.
- The contractor's bid package shall include the Caltrans Standard Special Provision "15-305" if yellow paint or yellow thermoplastic paint will be removed while grinding the entire pavement surface and the project will not require the paint or thermoplastic paint to be removed before grinding begins.

Air Quality-Avoidance and Minimization

- Caltrans Standard Specifications, Section 14-9.02, "Air Pollution Control," and Section 14-9.03 "Dust Control" shall be implemented to reduce construction related air quality impacts.

Noise-Avoidance and Minimization

- Caltrans standard specifications Section 14-8, "Noise and Vibration" shall be implemented to reduce construction related noise impacts.

Waters of the U.S. and Other Waters-Avoidance and Minimization

- All streambanks will be stabilized, and erosion control measures as well as Caltrans best management practices (BMPs) will be implemented. In addition, the project area will be left in pre-construction condition. All permit conditions will be adhered to.

Animal Species-Avoidance and Minimization

- All tree removal will be scheduled outside of the nesting season (February 15 – September 1). If the project activities begin within the nesting season due to the construction schedule, every effort will be made to remove the trees prior to this timeframe in order to avoid any nesting issues. If this cannot be done, a nesting bird survey will be conducted approximately two weeks prior to any ground disturbance. If any active nests are found, the appropriate buffer zones will be established around them, resource agency personnel will be contacted, and no work will be conducted within these areas.